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 <211> 251
 <212> PRT
 <213> Homo Sapien

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 Arg Tyr Trp Phe Ala Ala Thr Val Ala Val Pro Leu Val Gly Lys
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 Leu Gly Leu Ile Ser Pro Ala Tyr Leu Phe Leu Trp Pro Glu Ala
 35 40 45
 Phe Leu Tyr Arg Phe Gln Ile Trp Arg Pro Ile Thr Ala Thr Phe
 50 55 60
 Tyr Phe Pro Val Gly Pro Gly Thr Gly Phe Leu Tyr Leu Val Asn
 65 70 75
 Leu Tyr Phe Leu Tyr Gln Tyr Ser Thr Arg Leu Glu Thr Gly Ala
 80 85 90
 Phe Asp Gly Arg Pro Ala Asp Tyr Leu Phe Met Leu Leu Phe Asn
 95 100 105

Trp Ile Cys Ile Val Ile Thr Gly Leu Ala Met Asp Met Gln Leu
110 115 120

Leu Met Ile Pro Leu Ile Met Ser Val Leu Tyr Val Trp Ala Gln
125 130 135

Leu Asn Arg Asp Met Ile Val Ser Phe Trp Phe Gly Thr Arg Phe
140 145 150

Lys Ala Cys Tyr Leu Pro Trp Val Ile Leu Gly Phe Asn Tyr Ile
155 160 165

Ile Gly Gly Ser Val Ile Asn Glu Leu Ile Gly Asn Leu Val Gly
170 175 180

His Leu Tyr Phe Phe Leu Met Phe Arg Tyr Pro Met Asp Leu Gly
185 190 195

Gly Arg Asn Phe Leu Ser Thr Pro Gln Phe Leu Tyr Arg Trp Leu
200 205 210

Pro Ser Arg Arg Gly Gly Val Ser Gly Phe Gly Val Pro Pro Ala
215 220 225

Ser Met Arg Arg Ala Ala Asp Gln Asn Gly Gly Gly Gly Arg His
230 235 240

Asn Trp Gly Gln Gly Phe Arg Leu Gly Asp Gln
245 250

<210> 3

<211> 1351

<212> DNA

<213> Homo Sapien

<400> 3

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cgcggcacgt ccgcgaggac ttgaagtcct gagcgctcaa gtttgtccgt 150

aggtcgagag aaggccatgg aggtgccgcc accggcaccg cggagctttc 200

tctgtagagc attgtgccta tttccccgag tctttgctgc cgaagctgtg 250

actgccgatt cggaagtcct tgaggagcgt cagaagcggc ttccctacgt 300

cccagagccc tattaccgga aatctggatg ggaccgcctc cgggagctgt 350

ttggcaaaga tgaacagcag agaatttcaa aggaccttgc taatatctgt 400

aagacggcag ctacagcagg catcattggc tgggtgtatg ggggaatacc 450

agcttttatt catgctaaac aacaatacat tgagcagagc caggcagaaa 500

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 acgctggtga gactgttcag gaaagaaaac agaaggatcg aaaggcactc 850
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<210> 4
 <211> 285
 <212> PRT
 <213> Homo Sapien

<400> 4
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 Leu Cys Leu Phe Pro Arg Val Phe Ala Ala Glu Ala Val Thr Ala
 20 25 30
 Asp Ser Glu Val Leu Glu Glu Arg Gln Lys Arg Leu Pro Tyr Val
 35 40 45
 Pro Glu Pro Tyr Tyr Pro Glu Ser Gly Trp Asp Arg Leu Arg Glu
 50 55 60
 Leu Phe Gly Lys Asp Glu Gln Gln Arg Ile Ser Lys Asp Leu Ala
 65 70 75
 Asn Ile Cys Lys Thr Ala Ala Thr Ala Gly Ile Ile Gly Trp Val
 80 85 90

Tyr Gly Gly Ile Pro Ala Phe Ile His Ala Lys Gln Gln Tyr Ile
95 100 105

Glu Gln Ser Gln Ala Glu Ile Tyr His Asn Arg Phe Asp Ala Val
110 115 120

Gln Ser Ala His Arg Ala Ala Thr Arg Gly Phe Ile Arg Tyr Gly
125 130 135

Trp Arg Trp Gly Trp Arg Thr Ala Val Phe Val Thr Ile Phe Asn
140 145 150

Thr Val Asn Thr Ser Leu Asn Val Tyr Arg Asn Lys Asp Ala Leu
155 160 165

Ser His Phe Val Ile Ala Gly Ala Val Thr Gly Ser Leu Phe Arg
170 175 180

Ile Asn Val Gly Leu Arg Gly Leu Val Ala Gly Gly Ile Ile Gly
185 190 195

Ala Leu Leu Gly Thr Pro Val Gly Gly Leu Leu Met Ala Phe Gln
200 205 210

Lys Tyr Ala Gly Glu Thr Val Gln Glu Arg Lys Gln Lys Asp Arg
215 220 225

Lys Ala Leu His Glu Leu Lys Leu Glu Glu Trp Lys Gly Arg Leu
230 235 240

Gln Val Thr Glu His Leu Pro Glu Lys Ile Glu Ser Ser Leu Arg
245 250 255

Glu Asp Glu Pro Glu Asn Asp Ala Lys Lys Ile Glu Ala Leu Leu
260 265 270

Asn Leu Pro Arg Asn Pro Ser Val Ile Asp Lys Gln Asp Lys Asp
275 280 285

<210> 5

<211> 1487

<212> DNA

<213> Homo Sapien

<400> 5

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tagataat ttcggtggcca gaatgtgaat gtattgactg gagtgagaga 200

agaaatgctg tggcatctgt tgtcgcaggt atattgtttt ttacaggctg 250

gtggataatg attgatgcag ctgtggtgta tcctaagcca gaacagttga 300

accatgcctt tcacacatgt ggtgtatatt ccacattggc tttcttcattg 350

Gly Ile Leu Phe Phe Thr Gly Trp Trp Ile Met Ile Asp Ala Ala
35 40 45

Val Val Tyr Pro Lys Pro Glu Gln Leu Asn His Ala Phe His Thr
50 55 60

Cys Gly Val Phe Ser Thr Leu Ala Phe Phe Met Ile Asn Ala Val
65 70 75

Ser Asn Ala Gln Val Arg Gly Asp Ser Tyr Glu Ser Gly Cys Leu
80 85 90

Gly Arg Thr Gly Ala Arg Val Trp Leu Phe Ile Gly Phe Met Leu
95 100 105

Met Phe Gly Ser Leu Ile Ala Ser Met Trp Ile Leu Phe Gly Ala
110 115 120

Tyr Val Thr Gln Asn Thr Asp Val Tyr Pro Gly Leu Ala Val Phe
125 130 135

Phe Gln Asn Ala Leu Ile Phe Phe Ser Thr Leu Ile Tyr Lys Phe
140 145 150

Gly Arg Thr Glu Glu Leu Trp Thr
155

<210> 7

<211> 2886

<212> DNA

<213> Homo Sapien

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cactagaagc tcttctgagg gaggtaatta aaaaacagtg gaatggaaaa 200

acagtgcgtg agtcatcctg taatatgctc cttgtcaaca atgtatacat 250

tcttgctagg tgccatattc attgctttaa gctcaagtcg catcttacta 300

gtgaagtatt ctgccaatga agaaaacaag tatgattatc ttccaactac 350

tgtgaatgtg tgctcagaac tggatgaagct agttttctgt gtgcttgtgt 400

cattctgtgt tataaagaaa gatcatcaaa gtagaaattt gaaatatgct 450

tcttggaagg aattctctga tttcatgaag tggccattc ctgcctttct 500

ttatttctg gataacttga ttgtcttcta tgcctgtcc tatcttcaac 550

cagccatggc tggtatcttc tcaaatttta gcattataac aacagctctt 600

ctattcagga tagtgctgaa gaggcgtcta aactggatcc agtgggcttc 650

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Leu Asp Asn Leu	Ile Val Phe Tyr Val	Leu Ser Tyr Leu Gln Pro	110	115	120
Ala Met Ala Val	Ile Phe Ser Asn Phe	Ser Ile Ile Thr Thr Ala	125	130	135
Leu Leu Phe Arg	Ile Val Leu Lys Arg	Arg Leu Asn Trp Ile Gln	140	145	150
Trp Ala Ser Leu	Leu Thr Leu Phe Leu	Ser Ile Val Ala Leu Thr	155	160	165
Ala Gly Thr Lys	Thr Leu Gln His Asn	Leu Ala Gly Arg Gly Phe	170	175	180
His His Asp Ala	Phe Phe Ser Pro Ser	Asn Ser Cys Leu Leu Phe	185	190	195
Arg Ser Glu Cys	Pro Arg Lys Asp Asn	Cys Thr Ala Lys Glu Trp	200	205	210
Thr Phe Pro Glu	Ala Lys Trp Asn Thr	Thr Ala Arg Val Phe Ser	215	220	225
His Ile Arg Leu	Gly Met Gly His Val	Leu Ile Ile Val Gln Cys	230	235	240
Phe Ile Ser Ser	Met Ala Asn Ile Tyr	Asn Glu Lys Ile Leu Lys	245	250	255
Glu Gly Asn Gln	Leu Thr Glu Ser Ile	Phe Ile Gln Asn Ser Lys	260	265	270
Leu Tyr Phe Phe	Gly Ile Leu Phe Asn	Gly Leu Thr Leu Gly Leu	275	280	285
Gln Arg Ser Asn	Arg Asp Gln Ile Lys	Asn Cys Gly Phe Phe Tyr	290	295	300
Gly His Ser Ala	Phe Ser Val Ala Leu	Ile Phe Val Thr Ala Phe	305	310	315
Gln Gly Leu Ser	Val Ala Phe Ile Leu	Lys Phe Leu Asp Asn Met	320	325	330
Phe His Val Leu	Met Ala Gln Val Thr	Thr Val Ile Ile Thr Thr	335	340	345
Val Ser Val Leu	Val Phe Asp Phe Arg	Pro Ser Leu Glu Phe Phe	350	355	360
Leu Glu Ala Pro	Ser Val Leu Leu Ser	Ile Phe Ile Tyr Asn Ala	365	370	375
Ser Lys Pro Gln	Val Pro Glu Tyr Ala	Pro Arg Gln Glu Arg Ile	380	385	390
Arg Asp Leu Ser	Gly Asn Leu Trp Glu	Arg Ser Ser Gly Asp Gly			

395

400

405

Glu Glu Leu Glu Arg Leu Thr Lys Pro Lys Ser Asp Glu Ser Asp
410 415 420

Glu Asp Thr Phe

<210> 9

<211> 1173

<212> DNA

<213> Homo Sapien

<400> 9

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gaaaataaag tcaaaagact atg 1173

<210> 10

<211> 266

<212> PRT

<213> Homo Sapien

<400> 10

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Val Ile Trp Thr Ser Ala Ala Phe Ile Phe Ser Tyr Ile Thr Ala
20 25 30

Val Thr Leu His His Ile Asp Pro Ala Leu Pro Tyr Ile Ser Asp
35 40 45

Thr Gly Thr Val Ala Pro Glu Lys Cys Leu Phe Gly Ala Met Leu
50 55 60

Asn Ile Ala Ala Val Leu Cys Ile Ala Thr Ile Tyr Val Arg Tyr
65 70 75

Lys Gln Val His Ala Leu Ser Pro Glu Glu Asn Val Ile Ile Lys
80 85 90

Leu Asn Lys Ala Gly Leu Val Leu Gly Ile Leu Ser Cys Leu Gly
95 100 105

Leu Ser Ile Val Ala Asn Phe Gln Lys Thr Thr Leu Phe Ala Ala
110 115 120

His Val Ser Gly Ala Val Leu Thr Phe Gly Met Gly Ser Leu Tyr
125 130 135

Met Phe Val Gln Thr Ile Leu Ser Tyr Gln Met Gln Pro Lys Ile
140 145 150

His Gly Lys Gln Val Phe Trp Ile Arg Leu Leu Leu Val Ile Trp
155 160 165

Cys Gly Val Ser Ala Leu Ser Met Leu Thr Cys Ser Ser Val Leu
170 175 180

His Ser Gly Asn Phe Gly Thr Asp Leu Glu Gln Lys Leu His Trp
185 190 195

Asn Pro Glu Asp Lys Gly Tyr Val Leu His Met Ile Thr Thr Ala
200 205 210

Ala Glu Trp Ser Met Ser Phe Ser Phe Phe Gly Phe Phe Leu Thr
215 220 225

Tyr Ile Arg Asp Phe Gln Lys Ile Ser Leu Arg Val Glu Ala Asn
230 235 240

Leu His Gly Leu Thr Leu Tyr Asp Thr Ala Pro Cys Pro Ile Asn
245 250 255

Asn Glu Arg Thr Arg Leu Leu Ser Arg Asp Ile
260 265

<210> 11

<211> 1399

<212> DNA

<213> Homo Sapien

<400> 11

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ccttctggtc ttcgccggtc gcaccttcgc cttgtacttg ctgtcgacgc 150
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<210> 12

<211> 264

<212> PRT

<213> Homo Sapien

<400> 12

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Phe	Ala	Leu	Tyr	Leu	Leu	Ser	Thr	Arg	Leu	Pro	Arg	Gly	Arg	Arg
				20					25					30
Leu	Gly	Ser	Thr	Glu	Glu	Ala	Gly	Gly	Arg	Ser	Leu	Trp	Phe	Pro
				35					40					45
Ser	Asp	Leu	Ala	Glu	Leu	Arg	Glu	Leu	Ser	Glu	Val	Leu	Arg	Glu
				50					55					60
Tyr	Arg	Lys	Glu	His	Gln	Ala	Tyr	Val	Phe	Leu	Leu	Phe	Cys	Gly
				65					70					75
Ala	Tyr	Leu	Tyr	Lys	Gln	Gly	Phe	Ala	Ile	Pro	Gly	Ser	Ser	Phe
				80					85					90
Leu	Asn	Val	Leu	Ala	Gly	Ala	Leu	Phe	Gly	Pro	Trp	Leu	Gly	Leu
				95					100					105
Leu	Leu	Cys	Cys	Val	Leu	Thr	Ser	Val	Gly	Ala	Thr	Cys	Cys	Tyr
				110					115					120
Leu	Leu	Ser	Ser	Ile	Phe	Gly	Lys	Gln	Leu	Val	Val	Ser	Tyr	Phe
				125					130					135
Pro	Asp	Lys	Val	Ala	Leu	Leu	Gln	Arg	Lys	Val	Glu	Glu	Asn	Arg
				140					145					150
Asn	Ser	Leu	Phe	Phe	Phe	Leu	Leu	Phe	Leu	Arg	Leu	Phe	Pro	Met
				155					160					165
Thr	Pro	Asn	Trp	Phe	Leu	Asn	Leu	Ser	Ala	Pro	Ile	Leu	Asn	Ile
				170					175					180
Pro	Ile	Val	Gln	Phe	Phe	Phe	Ser	Val	Leu	Ile	Gly	Leu	Ile	Pro
				185					190					195
Tyr	Asn	Phe	Ile	Cys	Val	Gln	Thr	Gly	Ser	Ile	Leu	Ser	Thr	Leu
				200					205					210

Thr Ser Leu Asp Ala Leu Phe Ser Trp Asp Thr Val Phe Lys Leu
215 220 225

Leu Ala Ile Ala Met Val Ala Leu Ile Pro Gly Thr Leu Ile Lys
230 235 240

Lys Phe Ser Gln Lys His Leu Gln Leu Asn Glu Thr Ser Thr Ala
245 250 255

Asn His Ile His Ser Arg Lys Asp Thr
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<210> 13
<211> 2037
<212> DNA
<213> Homo Sapien

<400> 13
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gatcctgggt ttcattgggc ctttttacat tggctatttt attgtgagca 450
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<210> 14
 <211> 455
 <212> PRT
 <213> Homo Sapien

<400> 14
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 Lys Asp Tyr Glu Ile Arg Gln Tyr Val Val Gln Val Ile Phe Ser
 35 40 45
 Val Thr Phe Ala Phe Ser Cys Thr Met Phe Glu Leu Ile Ile Phe

	50		55		60
Glu Ile Leu Gly Val Leu Asn Ser Ser Ser Arg Tyr Phe His Trp	65		70		75
Lys Met Asn Leu Cys Val Ile Leu Leu Ile Leu Val Phe Met Val	80		85		90
Pro Phe Tyr Ile Gly Tyr Phe Ile Val Ser Asn Ile Arg Leu Leu	95		100		105
His Lys Gln Arg Leu Leu Phe Ser Cys Leu Leu Trp Leu Thr Phe	110		115		120
Met Tyr Phe Phe Trp Lys Leu Gly Asp Pro Phe Pro Ile Leu Ser	125		130		135
Pro Lys His Gly Ile Leu Ser Ile Glu Gln Leu Ile Ser Arg Val	140		145		150
Gly Val Ile Gly Val Thr Leu Met Ala Leu Leu Ser Gly Phe Gly	155		160		165
Ala Val Asn Cys Pro Tyr Thr Tyr Met Ser Tyr Phe Leu Arg Asn	170		175		180
Val Thr Asp Thr Asp Ile Leu Ala Leu Glu Arg Arg Leu Leu Gln	185		190		195
Thr Met Asp Met Ile Ile Ser Lys Lys Lys Arg Met Ala Met Ala	200		205		210
Arg Arg Thr Met Phe Gln Lys Gly Glu Val His Asn Lys Pro Ser	215		220		225
Gly Phe Trp Gly Met Ile Lys Ser Val Thr Thr Ser Ala Ser Gly	230		235		240
Ser Glu Asn Leu Thr Leu Ile Gln Gln Glu Val Asp Ala Leu Glu	245		250		255
Glu Leu Ser Arg Gln Leu Phe Leu Glu Thr Ala Asp Leu Tyr Ala	260		265		270
Thr Lys Glu Arg Ile Glu Tyr Ser Lys Thr Phe Lys Gly Lys Tyr	275		280		285
Phe Asn Phe Leu Gly Tyr Phe Phe Ser Ile Tyr Cys Val Trp Lys	290		295		300
Ile Phe Met Ala Thr Ile Asn Ile Val Phe Asp Arg Val Gly Lys	305		310		315
Thr Asp Pro Val Thr Arg Gly Ile Glu Ile Thr Val Asn Tyr Leu	320		325		330
Gly Ile Gln Phe Asp Val Lys Phe Trp Ser Gln His Ile Ser Phe	335		340		345

Ile Leu Val Gly Ile Ile Ile Val Thr Ser Ile Arg Gly Leu Leu
350 355 360

Ile Thr Leu Thr Lys Phe Phe Tyr Ala Ile Ser Ser Ser Lys Ser
365 370 375

Ser Asn Val Ile Val Leu Leu Leu Ala Gln Ile Met Gly Met Tyr
380 385 390

Phe Val Ser Ser Val Leu Leu Ile Arg Met Ser Met Pro Leu Glu
395 400 405

Tyr Arg Thr Ile Ile Thr Glu Val Leu Gly Glu Leu Gln Phe Asn
410 415 420

Phe Tyr His Arg Trp Phe Asp Val Ile Phe Leu Val Ser Ala Leu
425 430 435

Ser Ser Ile Leu Phe Leu Tyr Leu Ala His Lys Gln Ala Pro Glu
440 445 450

Lys Gln Met Ala Pro
455

<210> 15
<211> 2362
<212> DNA
<213> Homo Sapien

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cacagcgcca cgcgcttcga cccacactgg gagtccctgg acgcccgcca 200
gctgcccgcg tggtttgacc aggccaagtt cggcatcttc atccactggg 250
gagtgttttc cgtgcccagc ttcggtagcg agtggttctg gtggtattgg 300
caaaaggaaa agataccgaa gtatgtggaa tttatgaaag ataattaccc 350
tcctagtttc aaatatgaag attttgacc actatttaca gcaaaatttt 400
ttaatgcaa ccagtgggca gatatttttc aggcctctgg tgccaaatac 450
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 ctctaggct acagacatat acagcatgtt actgaatact gtaggcaata 2000
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tgtgaaggcc taggacatta ttgaacactg ccagacgtta taaatactgt 2200
atgcttaggc tacactacat ttataaaaaa aagtttttct ttcttcaatt 2250
ataaattaac ataagtgtac tgtaacttta caaacgtttt aatttttaaa 2300
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gtgcaaattgt aa 2362

<210> 16
<211> 467
<212> PRT
<213> Homo Sapien

<400> 16
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Leu Leu Leu Leu Leu Leu Pro Pro Pro Pro Cys Pro Ala His Ser
20 25 30
Ala Thr Arg Phe Asp Pro Thr Trp Glu Ser Leu Asp Ala Arg Gln
35 40 45
Leu Pro Ala Trp Phe Asp Gln Ala Lys Phe Gly Ile Phe Ile His
50 55 60
Trp Gly Val Phe Ser Val Pro Ser Phe Gly Ser Glu Trp Phe Trp
65 70 75
Trp Tyr Trp Gln Lys Glu Lys Ile Pro Lys Tyr Val Glu Phe Met
80 85 90
Lys Asp Asn Tyr Pro Pro Ser Phe Lys Tyr Glu Asp Phe Gly Pro
95 100 105
Leu Phe Thr Ala Lys Phe Phe Asn Ala Asn Gln Trp Ala Asp Ile
110 115 120
Phe Gln Ala Ser Gly Ala Lys Tyr Ile Val Leu Thr Ser Lys His
125 130 135
His Glu Gly Phe Thr Leu Trp Gly Ser Glu Tyr Ser Trp Asn Trp
140 145 150
Asn Ala Ile Asp Glu Gly Pro Lys Arg Asp Ile Val Lys Glu Leu
155 160 165
Glu Val Ala Ile Arg Asn Arg Thr Asp Leu Arg Phe Gly Leu Tyr
170 175 180
Tyr Ser Leu Phe Glu Trp Phe His Pro Leu Phe Leu Glu Asp Glu
185 190 195
Ser Ser Ser Phe His Lys Arg Gln Phe Pro Val Ser Lys Thr Leu
200 205 210

Pro	Glu	Leu	Tyr	Glu	Leu	Val	Asn	Asn	Tyr	Gln	Pro	Glu	Val	Leu	215	220	225
Trp	Ser	Asp	Gly	Asp	Gly	Gly	Ala	Pro	Asp	Gln	Tyr	Trp	Asn	Ser	230	235	240
Thr	Gly	Phe	Leu	Ala	Trp	Leu	Tyr	Asn	Glu	Ser	Pro	Val	Arg	Gly	245	250	255
Thr	Val	Val	Thr	Asn	Asp	Arg	Trp	Gly	Ala	Gly	Ser	Ile	Cys	Lys	260	265	270
His	Gly	Gly	Phe	Tyr	Thr	Cys	Ser	Asp	Arg	Tyr	Asn	Pro	Gly	His	275	280	285
Leu	Leu	Pro	His	Lys	Trp	Glu	Asn	Cys	Met	Thr	Ile	Asp	Lys	Leu	290	295	300
Ser	Trp	Gly	Tyr	Arg	Arg	Glu	Ala	Gly	Ile	Ser	Asp	Tyr	Leu	Thr	305	310	315
Ile	Glu	Glu	Leu	Val	Lys	Gln	Leu	Val	Glu	Thr	Val	Ser	Cys	Gly	320	325	330
Gly	Asn	Leu	Leu	Met	Asn	Ile	Gly	Pro	Thr	Leu	Asp	Gly	Thr	Ile	335	340	345
Ser	Val	Val	Phe	Glu	Glu	Arg	Leu	Arg	Gln	Val	Gly	Ser	Trp	Leu	350	355	360
Lys	Val	Asn	Gly	Glu	Ala	Ile	Tyr	Glu	Thr	Tyr	Thr	Trp	Arg	Ser	365	370	375
Gln	Asn	Asp	Thr	Val	Thr	Pro	Asp	Val	Trp	Tyr	Thr	Ser	Lys	Pro	380	385	390
Lys	Glu	Lys	Leu	Val	Tyr	Ala	Ile	Phe	Leu	Lys	Trp	Pro	Thr	Ser	395	400	405
Gly	Gln	Leu	Phe	Leu	Gly	His	Pro	Lys	Ala	Ile	Leu	Gly	Ala	Thr	410	415	420
Glu	Val	Lys	Leu	Leu	Gly	His	Gly	Gln	Pro	Leu	Asn	Trp	Ile	Ser	425	430	435
Leu	Glu	Gln	Asn	Gly	Ile	Met	Val	Glu	Leu	Pro	Gln	Leu	Thr	Ile	440	445	450
His	Gln	Met	Pro	Cys	Lys	Trp	Gly	Trp	Ala	Leu	Ala	Leu	Thr	Asn	455	460	465

Val Ile

<210> 17

<211> 1771

<212> DNA

<213> Homo Sapien

<400> 17

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<210> 18
<211> 300
<212> PRT
<213> Homo Sapien

<400> 18
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Arg Lys Ser Val Thr Gly Glu Ile Val Leu Ile Thr Gly Ala Gly
35 40 45
His Gly Ile Gly Arg Leu Thr Ala Tyr Glu Phe Ala Lys Leu Lys
50 55 60
Ser Lys Leu Val Leu Trp Asp Ile Asn Lys His Gly Leu Glu Glu
65 70 75
Thr Ala Ala Lys Cys Lys Gly Leu Gly Ala Lys Val His Thr Phe
80 85 90
Val Val Asp Cys Ser Asn Arg Glu Asp Ile Tyr Ser Ser Ala Lys
95 100 105
Lys Val Lys Ala Glu Ile Gly Asp Val Ser Ile Leu Val Asn Asn
110 115 120
Ala Gly Val Val Tyr Thr Ser Asp Leu Phe Ala Thr Gln Asp Pro
125 130 135
Gln Ile Glu Lys Thr Phe Glu Val Asn Val Leu Ala His Phe Trp
140 145 150
Thr Thr Lys Ala Phe Leu Pro Ala Met Thr Lys Asn Asn His Gly
155 160 165
His Ile Val Thr Val Ala Ser Ala Ala Gly His Val Ser Val Pro
170 175 180
Phe Leu Leu Ala Tyr Cys Ser Ser Lys Phe Ala Ala Val Gly Phe
185 190 195

His	Lys	Thr	Leu	Thr	Asp	Glu	Leu	Ala	Ala	Leu	Gln	Ile	Thr	Gly	200	205	210
Val	Lys	Thr	Thr	Cys	Leu	Cys	Pro	Asn	Phe	Val	Asn	Thr	Gly	Phe	215	220	225
Ile	Lys	Asn	Pro	Ser	Thr	Ser	Leu	Gly	Pro	Thr	Leu	Glu	Pro	Glu	230	235	240
Glu	Val	Val	Asn	Arg	Leu	Met	His	Gly	Ile	Leu	Thr	Glu	Gln	Lys	245	250	255
Met	Ile	Phe	Ile	Pro	Ser	Ser	Ile	Ala	Phe	Leu	Thr	Thr	Leu	Glu	260	265	270
Arg	Ile	Leu	Pro	Glu	Arg	Phe	Leu	Ala	Val	Leu	Lys	Arg	Lys	Ile	275	280	285
Ser	Val	Lys	Phe	Asp	Ala	Val	Ile	Gly	Tyr	Lys	Met	Lys	Ala	Gln	290	295	300

<210> 19
 <211> 1815
 <212> DNA
 <213> Homo Sapien

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 agcaggaaaa aaaaa 1815

<210> 20
 <211> 382
 <212> PRT
 <213> Homo Sapien

<400> 20
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 20 25 30
 Asp Leu Asp Leu Arg Gly Gly Gln Pro Val Cys Arg Gly Gly Thr
 35 40 45
 Gln Arg Pro Cys Tyr Lys Val Ile Tyr Phe His Asp Thr Ser Arg

				50					55					60
Arg	Leu	Asn	Phe	Glu 65	Glu	Ala	Lys	Glu	Ala 70	Cys	Arg	Arg	Asp	Gly 75
Gly	Gln	Leu	Val	Ser 80	Ile	Glu	Ser	Glu	Asp 85	Glu	Gln	Lys	Leu	Ile 90
Glu	Lys	Phe	Ile	Glu 95	Asn	Leu	Leu	Pro	Ser 100	Asp	Gly	Asp	Phe	Trp 105
Ile	Gly	Leu	Arg	Arg 110	Arg	Glu	Glu	Lys	Gln 115	Ser	Asn	Ser	Thr	Ala 120
Cys	Gln	Asp	Leu	Tyr 125	Ala	Trp	Thr	Asp	Gly 130	Ser	Ile	Ser	Gln	Phe 135
Arg	Asn	Trp	Tyr	Val 140	Asp	Glu	Pro	Ser	Cys 145	Gly	Ser	Glu	Val	Cys 150
Val	Val	Met	Tyr	His 155	Gln	Pro	Ser	Ala	Pro 160	Ala	Gly	Ile	Gly	Gly 165
Pro	Tyr	Met	Phe	Gln 170	Trp	Asn	Asp	Asp	Arg 175	Cys	Asn	Met	Lys	Asn 180
Asn	Phe	Ile	Cys	Lys 185	Tyr	Ser	Asp	Glu	Lys 190	Pro	Ala	Val	Pro	Ser 195
Arg	Glu	Ala	Glu	Gly 200	Glu	Glu	Thr	Glu	Leu 205	Thr	Thr	Pro	Val	Leu 210
Pro	Glu	Glu	Thr	Gln 215	Glu	Glu	Asp	Ala	Lys 220	Lys	Thr	Phe	Lys	Glu 225
Ser	Arg	Glu	Ala	Ala 230	Leu	Asn	Leu	Ala	Tyr 235	Ile	Leu	Ile	Pro	Ser 240
Ile	Pro	Leu	Leu	Leu 245	Leu	Leu	Val	Val	Thr 250	Thr	Val	Val	Cys	Trp 255
Val	Trp	Ile	Cys	Arg 260	Lys	Arg	Lys	Arg	Glu 265	Gln	Pro	Asp	Pro	Ser 270
Thr	Lys	Lys	Gln	His 275	Thr	Ile	Trp	Pro	Ser 280	Pro	His	Gln	Gly	Asn 285
Ser	Pro	Asp	Leu	Glu 290	Val	Tyr	Asn	Val	Ile 295	Arg	Lys	Gln	Ser	Glu 300
Ala	Asp	Leu	Ala	Glu 305	Thr	Arg	Pro	Asp	Leu 310	Lys	Asn	Ile	Ser	Phe 315
Arg	Val	Cys	Ser	Gly 320	Glu	Ala	Thr	Pro	Asp 325	Asp	Met	Ser	Cys	Asp 330
Tyr	Asp	Asn	Met	Ala 335	Val	Asn	Pro	Ser	Glu 340	Ser	Gly	Phe	Val	Thr 345

Leu Val Ser Val Glu Ser Gly Phe Val Thr Asn Asp Ile Tyr Glu
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Phe Ser Pro Asp Gln Met Gly Arg Ser Lys Glu Ser Gly Trp Val
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Glu Asn Glu Ile Tyr Gly Tyr
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 <213> Homo Sapien

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 <221> unsure
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 <223> unknown amino acid

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 35 40 45
 Gly Leu Gln Ala Lys Gly Trp Asn Phe Met Leu Glu Asp Ser Thr
 50 55 60
 Phe Trp Ile Phe Gly Gly Ser Ile His Tyr Phe Arg Val Pro Arg
 65 70 75
 Glu Tyr Trp Arg Asp Arg Leu Leu Lys Met Lys Ala Cys Gly Leu
 80 85 90

Asn Thr Leu Thr Thr Tyr Val Pro Trp	Asn Leu His Glu Pro Glu	95	100	105
Arg Gly Lys Phe Asp Phe Ser Gly Asn	Leu Asp Leu Glu Ala Phe	110	115	120
Val Leu Met Ala Ala Glu Ile Gly Leu	Trp Val Ile Leu Arg Pro	125	130	135
Gly Pro Tyr Ile Cys Ser Glu Met Asp	Leu Gly Gly Leu Pro Ser	140	145	150
Trp Leu Leu Gln Asp Pro Gly Met Arg	Leu Arg Thr Thr Tyr Lys	155	160	165
Gly Phe Thr Glu Ala Val Asp Leu Tyr	Phe Asp His Leu Met Ser	170	175	180
Arg Val Val Pro Leu Gln Tyr Lys Arg	Gly Gly Pro Ile Ile Ala	185	190	195
Val Gln Val Glu Asn Glu Tyr Gly Ser	Tyr Asn Lys Asp Pro Ala	200	205	210
Tyr Met Pro Tyr Val Lys Lys Ala Leu	Glu Asp Arg Gly Ile Val	215	220	225
Glu Leu Leu Leu Thr Ser Asp Asn Lys	Asp Gly Leu Ser Lys Gly	230	235	240
Ile Val Gln Gly Val Leu Ala Thr Ile	Asn Leu Gln Ser Thr His	245	250	255
Glu Leu Gln Leu Leu Thr Thr Phe Leu	Phe Asn Val Gln Gly Thr	260	265	270
Gln Pro Lys Met Val Met Glu Tyr Trp	Thr Gly Trp Phe Asp Ser	275	280	285
Trp Gly Gly Pro His Asn Ile Leu Asp	Ser Ser Glu Val Leu Lys	290	295	300
Thr Val Ser Ala Ile Val Asp Ala Gly	Ser Ser Ile Asn Leu Tyr	305	310	315
Met Phe His Gly Gly Thr Asn Phe Gly	Phe Met Asn Gly Ala Met	320	325	330
His Phe His Asp Tyr Lys Ser Asp Val	Thr Ser Tyr Asp Tyr Asp	335	340	345
Ala Val Leu Thr Glu Ala Gly Asp Tyr	Thr Ala Lys Tyr Met Lys	350	355	360
Leu Arg Asp Phe Phe Gly Ser Ile Ser	Gly Ile Pro Leu Pro Pro	365	370	375
Pro Pro Asp Leu Leu Pro Lys Met Pro	Tyr Glu Pro Leu Thr Pro			

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Pro Ile Lys Ser Glu Lys Pro Ile Asn	Met Glu Asn Leu Pro Val	
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Ser Ile Thr Ser Ser Gly Ile Leu Ser	Gly His Val His Asp Arg	
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Gly Gln Val Phe Val Asn Thr Val Ser	Ile Gly Phe Leu Asp Tyr	
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Lys Thr Thr Lys Ile Ala Val Pro Leu	Ile Gln Gly Tyr Thr Val	
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Ser Ile Ser Ser Thr Pro Cys Asp Thr	Phe Leu Lys Leu Glu Gly	
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Trp Glu Lys Gly Val Val Phe Ile Asn	Gly Gln Asn Leu Gly Arg	
575	580	585
Tyr Trp Asn Ile Gly Pro Gln Lys Thr	Leu Tyr Leu Pro Gly Pro	
590	595	600
Trp Leu Ser Ser Gly Ile Asn Gln Val	Ile Val Phe Glu Glu Thr	
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Met Ala Gly Pro Ala Leu Gln Phe Thr	Glu Thr Pro His Leu Gly	
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Arg Asn Gln Tyr Ile Lys		
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 <211> 997
 <212> DNA
 <213> Homo Sapien

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<211> 219
<212> PRT
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Ile	Leu	Phe	Leu	Ser	Ala	Cys	Phe	Ile	Thr	Arg	Cys	Val	Val	Thr
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Phe	Arg	Ile	Phe	Gln	Thr	Cys	Asp	Glu	Lys	Lys	Phe	Gln	Leu	Pro
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Glu Asn Phe Thr Glu Leu Ser Cys Tyr Asn Tyr Gly Ser Gly Ser
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Val Lys Asn Cys Cys Pro Leu Asn Trp Glu Tyr Phe Gln Ser Ser
80 85 90

Cys Tyr Phe Phe Ser Thr Asp Thr Ile Ser Trp Ala Leu Ser Leu
95 100 105

Lys Asn Cys Ser Ala Met Gly Ala His Leu Val Val Ile Asn Ser
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Gln Glu Glu Gln Glu Phe Leu Ser Tyr Lys Lys Pro Lys Met Arg
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Glu Phe Phe Ile Gly Leu Ser Asp Gln Val Val Glu Gly Gln Trp
140 145 150

Gln Trp Val Asp Gly Thr Pro Leu Thr Lys Ser Leu Ser Phe Trp
155 160 165

Asp Val Gly Glu Pro Asn Asn Ile Ala Thr Leu Glu Asp Cys Ala
170 175 180

Thr Met Arg Asp Ser Ser Asn Pro Arg Gln Asn Trp Asn Asp Val
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Thr Cys Phe Leu Asn Tyr Phe Arg Ile Cys Glu Met Val Gly Ile
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Asn Pro Leu Asn Lys Gly Lys Ser Leu
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 <212> PRT
 <213> Homo Sapien

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 35 40 45
 Phe Arg Tyr Val Ser Gly Ser Leu His Tyr Phe Arg Val Pro Arg
 50 55 60
 Val Leu Trp Ala Asp Arg Leu Leu Lys Met Arg Trp Ser Gly Leu
 65 70 75
 Asn Ala Ile Gln Phe Tyr Val Pro Trp Asn Tyr His Glu Pro Gln
 80 85 90
 Pro Gly Val Tyr Asn Phe Asn Gly Ser Arg Asp Leu Ile Ala Phe
 95 100 105
 Leu Asn Glu Ala Ala Leu Ala Asn Leu Leu Val Ile Leu Arg Pro
 110 115 120
 Gly Pro Tyr Ile Cys Ala Glu Trp Glu Met Gly Gly Leu Pro Ser
 125 130 135
 Trp Leu Leu Arg Lys Pro Glu Ile His Leu Arg Thr Ser Asp Pro

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Lys Ile Tyr Pro Trp	Leu Tyr His Asn Gly Gly Asn Ile Ile Ser	
170	175	180
Ile Gln Val Glu Asn	Glu Tyr Gly Ser Tyr Arg Ala Cys Asp Phe	
185	190	195
Ser Tyr Met Arg His	Leu Ala Gly Leu Phe Arg Ala Leu Leu Gly	
200	205	210
Glu Lys Ile Leu Leu	Phe Thr Thr Asp Gly Pro Glu Gly Leu Lys	
215	220	225
Cys Gly Ser Leu Arg	Gly Leu Tyr Thr Thr Val Asp Phe Gly Pro	
230	235	240
Ala Asp Asn Met Thr	Lys Ile Phe Thr Leu Leu Arg Lys Tyr Glu	
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Pro His Gly Pro Leu	Val Asn Ser Glu Tyr Tyr Thr Gly Trp Leu	
260	265	270
Asp Tyr Trp Gly Gln	Asn His Ser Thr Arg Ser Val Ser Ala Val	
275	280	285
Thr Lys Gly Leu Glu	Asn Met Leu Lys Leu Gly Ala Ser Val Asn	
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Met Tyr Met Phe His	Gly Gly Thr Asn Phe Gly Tyr Trp Asn Gly	
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Ala Asp Lys Lys Gly	Arg Phe Leu Pro Ile Thr Thr Ser Tyr Asp	
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Tyr Asp Ala Pro Ile	Ser Glu Ala Gly Asp Pro Thr Pro Lys Leu	
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Phe Ala Leu Arg Asp	Val Ile Ser Lys Phe Gln Glu Val Pro Leu	
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Gly Pro Leu Pro Pro	Pro Ser Pro Lys Met Met Leu Gly Pro Val	
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Thr Leu His Leu Val	Gly His Leu Leu Ala Phe Leu Asp Leu Leu	
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Cys Pro Arg Gly Pro	Ile His Ser Ile Leu Pro Met Thr Phe Glu	
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Ala Val Lys Gln Asp	His Gly Phe Met Leu Tyr Arg Thr Tyr Met	
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Thr His Thr Ile Phe	Glu Pro Thr Pro Phe Trp Val Pro Asn Asn	
425	430	435

Gly Val His Asp Arg Ala Tyr Val Met Val Asp Gly Val Phe Gln
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Gly Val Val Glu Arg Asn Met Arg Asp Lys Leu Phe Leu Thr Gly
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Lys Leu Gly Ser Lys Leu Asp Ile Leu Val Glu Asn Met Gly Arg
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Pro Pro Ile Leu Gly Gln Thr Ile Leu Thr Gln Trp Met Met Phe
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Pro Leu Lys Ile Asp Asn Leu Val Lys Trp Trp Phe Pro Leu Gln
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Leu Pro Lys Trp Pro Tyr Pro Gln Ala Pro Ser Gly Pro Thr Phe
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Tyr Ser Lys Thr Phe Pro Ile Leu Gly Ser Val Gly Asp Thr Phe
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Leu Tyr Val Pro Arg Phe Leu Leu Phe Pro Arg Gly Ala Leu Asn
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Lys Ile Thr Leu Leu Glu Leu Glu Asp Val Pro Leu Gln Pro Gln
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Val Gln Phe Leu Asp Lys Pro Ile Leu Asn Ser Thr Ser Thr Leu
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<211> 1985
<212> DNA
<213> Homo Sapien

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<211> 280

<212> PRT

<213> Homo Sapien

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Leu	Ser	Gly	Arg	Phe	Ile	Ile	Thr	Ala	Leu	Pro	Thr	Ile	Tyr	His	
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Ser	Met	Ser	Ala	Leu	Phe	Gln	Leu	Ser	Met	Trp	Ile	Arg	Thr	Cys	
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His	Asn	Tyr	Phe	Ile	Glu	Asp	Leu	Gly	Leu	Pro	Val	Trp	Gly	Ser	

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<211> 296

<212> PRT

<213> Homo Sapien

<400> 32

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				20					25					30

Leu	Leu	Ser	Ala	Ala	Phe	Leu	Leu	Val	Arg	Lys	Leu	Pro	Pro	Leu
				35					40					45

Cys	His	Gly	Leu	Pro	Thr	Gln	Arg	Glu	Asp	Gly	Asn	Pro	Cys	Asp
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 <211> 440

<212> PRT

<213> Homo Sapien

<400> 34

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				20					25					30	
Phe	Ser	Ala	Ala	Ala	Leu	Ile	Pro	Thr	Gly	Asp	Gly	Gln	Asn	Leu	
				35					40					45	
Phe	Thr	Lys	Asp	Val	Thr	Val	Ile	Glu	Gly	Glu	Val	Ala	Thr	Ile	
				50					55					60	
Ser	Cys	Gln	Val	Asn	Lys	Ser	Asp	Asp	Ser	Val	Ile	Gln	Leu	Leu	
				65					70					75	
Asn	Pro	Asn	Arg	Gln	Thr	Ile	Tyr	Phe	Arg	Asp	Phe	Arg	Pro	Leu	
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Lys	Asp	Ser	Arg	Phe	Gln	Leu	Leu	Asn	Phe	Ser	Ser	Ser	Glu	Leu	
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Lys	Val	Ser	Leu	Thr	Asn	Val	Ser	Ile	Ser	Asp	Glu	Gly	Arg	Tyr	
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Phe	Cys	Gln	Leu	Tyr	Thr	Asp	Pro	Pro	Gln	Glu	Ser	Tyr	Thr	Thr	
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Ile	Thr	Val	Leu	Val	Pro	Pro	Arg	Asn	Leu	Met	Ile	Asp	Ile	Gln	
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Ala	Met	Ala	Ser	Lys	Pro	Ala	Thr	Thr	Ile	Arg	Trp	Phe	Lys	Gly	
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Asn	Thr	Glu	Leu	Lys	Gly	Lys	Ser	Glu	Val	Glu	Glu	Trp	Ser	Asp	
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Met	Tyr	Thr	Val	Thr	Ser	Gln	Leu	Met	Leu	Lys	Val	His	Lys	Glu	
				200					205					210	
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Thr	Gly	Asn	Leu	Gln	Thr	Gln	Arg	Tyr	Leu	Glu	Val	Gln	Tyr	Lys	
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Pro	Gln	Val	His	Ile	Gln	Met	Thr	Tyr	Pro	Leu	Gln	Gly	Leu	Thr	
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Arg	Glu	Gly	Asp	Ala	Leu	Glu	Leu	Thr	Cys	Glu	Ala	Ile	Gly	Lys	
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275 280 285

Pro Gln His Ala Val Leu Ser Gly Pro Asn Leu Phe Ile Asn Asn
290 295 300

Leu Asn Lys Thr Asp Asn Gly Thr Tyr Arg Cys Glu Ala Ser Asn
305 310 315

Ile Val Gly Lys Ala His Ser Asp Tyr Met Leu Tyr Val Tyr Asp
320 325 330

Pro Pro Thr Thr Ile Pro Pro Pro Thr Thr Thr Thr Thr Thr
335 340 345

Thr Thr Thr Thr Thr Thr Ile Leu Thr Ile Ile Thr Asp Ser Arg
350 355 360

Ala Gly Glu Glu Gly Ser Ile Arg Ala Val Asp His Ala Val Ile
365 370 375

Gly Gly Val Val Ala Val Val Val Phe Ala Met Leu Cys Leu Leu
380 385 390

Ile Ile Leu Gly Arg Tyr Phe Ala Arg His Lys Gly Thr Tyr Phe
395 400 405

Thr His Glu Ala Lys Gly Ala Asp Asp Ala Ala Asp Ala Asp Thr
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<210> 35
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<212> DNA
<213> Homo Sapien

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<210> 37
 <211> 3231
 <212> DNA
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<210> 38

<211> 737

<212> PRT

<213> Homo Sapien

<400> 38

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Ser	Ser	Leu	Ala	Asn	Pro	Val	Pro	Ala	Ala	Pro	Leu	Ser	Ala	Pro	35	40	45	
Gly	Pro	Cys	Ala	Ala	Gln	Pro	Cys	Arg	Asn	Gly	Gly	Val	Cys	Thr	50	55	60	
Ser	Arg	Pro	Glu	Pro	Asp	Pro	Gln	His	Pro	Ala	Pro	Ala	Gly	Glu	65	70	75	
Pro	Gly	Tyr	Ser	Cys	Thr	Cys	Pro	Ala	Gly	Ile	Ser	Gly	Ala	Asn	80	85	90	
Cys	Gln	Leu	Val	Ala	Asp	Pro	Cys	Ala	Ser	Asn	Pro	Cys	His	His	95	100	105	
Gly	Asn	Cys	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Asp	Gly	Tyr	Leu	110	115	120	
Cys	Ile	Cys	Asn	Glu	Gly	Tyr	Glu	Gly	Pro	Asn	Cys	Glu	Gln	Ala	125	130	135	
Leu	Pro	Ser	Leu	Pro	Ala	Thr	Gly	Trp	Thr	Glu	Ser	Met	Ala	Pro	140	145	150	
Arg	Gln	Leu	Gln	Pro	Val	Pro	Ala	Thr	Gln	Glu	Pro	Asp	Lys	Ile	155	160	165	

Leu	Pro	Arg	Ser	Gln	Ala	Thr	Val	Thr	Leu	Pro	Thr	Trp	Gln	Pro	170	175	180
Lys	Thr	Gly	Gln	Lys	Val	Val	Glu	Met	Lys	Trp	Asp	Gln	Val	Glu	185	190	195
Val	Ile	Pro	Asp	Ile	Ala	Cys	Gly	Asn	Ala	Ser	Ser	Asn	Ser	Ser	200	205	210
Ala	Gly	Gly	Arg	Leu	Val	Ser	Phe	Glu	Val	Pro	Gln	Asn	Thr	Ser	215	220	225
Val	Lys	Ile	Arg	Gln	Asp	Ala	Thr	Ala	Ser	Leu	Ile	Leu	Leu	Trp	230	235	240
Lys	Val	Thr	Ala	Thr	Gly	Phe	Gln	Gln	Cys	Ser	Leu	Ile	Asp	Gly	245	250	255
Arg	Ser	Val	Thr	Pro	Leu	Gln	Ala	Ser	Gly	Gly	Leu	Val	Leu	Leu	260	265	270
Glu	Glu	Met	Leu	Ala	Leu	Gly	Asn	Asn	His	Phe	Ile	Gly	Phe	Val	275	280	285
Asn	Asp	Ser	Val	Thr	Lys	Ser	Ile	Val	Ala	Leu	Arg	Leu	Thr	Leu	290	295	300
Val	Val	Lys	Val	Ser	Thr	Cys	Val	Pro	Gly	Glu	Ser	His	Ala	Asn	305	310	315
Asp	Leu	Glu	Cys	Ser	Gly	Lys	Gly	Lys	Cys	Thr	Thr	Lys	Pro	Ser	320	325	330
Glu	Ala	Thr	Phe	Ser	Cys	Thr	Cys	Glu	Glu	Gln	Tyr	Val	Gly	Thr	335	340	345
Phe	Cys	Glu	Glu	Tyr	Asp	Ala	Cys	Gln	Arg	Lys	Pro	Cys	Gln	Asn	350	355	360
Asn	Ala	Ser	Cys	Ile	Asp	Ala	Asn	Glu	Lys	Gln	Asp	Gly	Ser	Asn	365	370	375
Phe	Thr	Cys	Val	Cys	Leu	Pro	Gly	Tyr	Thr	Gly	Glu	Leu	Cys	Gln	380	385	390
Ser	Lys	Ile	Asp	Tyr	Cys	Ile	Leu	Asp	Pro	Cys	Arg	Asn	Gly	Ala	395	400	405
Thr	Cys	Ile	Ser	Ser	Leu	Ser	Gly	Phe	Thr	Cys	Gln	Cys	Pro	Glu	410	415	420
Gly	Tyr	Phe	Gly	Ser	Ala	Cys	Glu	Glu	Lys	Val	Asp	Pro	Cys	Ala	425	430	435
Ser	Ser	Pro	Cys	Gln	Asn	Asn	Gly	Thr	Cys	Tyr	Val	Asp	Gly	Val	440	445	450
His	Phe	Thr	Cys	Asn	Cys	Ser	Pro	Gly	Phe	Thr	Gly	Pro	Thr	Cys			

<210> 39
 <211> 1819
 <212> DNA
 <213> Homo Sapien

<400> 39
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 ccaccacagt ctgcgttgct gccccgcctg ggccaggccc caaaggcaag 100
 gacaaagcag ctgtcaggga acctccgcgc gagtcgaatt tacgtgcagc 150
 tgccggcaac cacaggttcc aagatggttt gcgggggctt cgcgtgttcc 200
 aagaactgcc tgtgcgcctt caacctgctt tacaccttgg ttagtctgct 250
 gctaattgga attgctgcgt ggggcattgg cttcgggctg atttccagtc 300
 tccgagtggc cggcgtggc attgcagtgg gcattcttct gttcctgatt 350
 gcttttagtg gtctgattgg agctgtaaaa catcatcagg tgttgctatt 400
 tttttatatg attattctgt tacttgattt tattgttcag ttttctgtat 450
 cttgcgcttg tttagccctg aaccaggagc aacagggtca gcttctggag 500
 gttggttggg acaatacggc aagtgtcga aatgacatcc agagaaatct 550
 aaactgctgt gggttccgaa gtgttaaccc aaatgacacc tgtctggcta 600
 gctgtgttaa aagtgaccac tcgtgtctgc catgtgtctc aatcatagga 650
 gaatatgctg gagaggtttt gagatttggt ggtggcattg gcctgttctt 700
 cagttttaca gagatcctgg gtgtttggct gacctacaga tacaggaacc 750
 agaaagaccc ccgcgcgaat cctagtgcac tcctttgatg agaaaacaag 800
 gaagatttcc tttcgtatta tgatcttggt cactttctgt aattttctgt 850
 taagctccat ttgccagttt aaggaaggaa acactatctg gaaaagtacc 900
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 cctttcttag catttttacc tgcagaaaaa ctttgtatgg taccactgtg 1100
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 agcactgtgc tgtgtagata gttcctactg gaaaaagagt ggaaatttat 1200
 taaaatcaga aagtatgaga tcctgttatg ttaagggaaa tccaaattcc 1250
 caattttttt tggctctttt aggaaagatt gttgtggtaa aaagtgttag 1300

tataaaaaatg ataatttact tgtagtcttt tatgattaca ccaatgtatt 1350
ctagaaatag ttatgtctta ggaaattgtg gtttaatttt tgacttttac 1400
aggttaagtgc aaaggagaag tggtttcatg aaatgttcta atgtataata 1450
acattttacct tcagcctcca tcagaatgga acgagttttg agtaatcagg 1500
aagtatatct atatgatctt gatattgttt tataataatt tgaagtctaa 1550
aagactgcat ttttaaacaa gttagtatta atgcgttggc ccacgtagca 1600
aaaagatatt tgattatctt aaaaattggt aaataccggt ttcatgaaat 1650
ttctcagtat tgtaacagca acttgtcaaa cctaagcata tttgaatatg 1700
atctcccata atttgaaatt gaaatcgtat tgtgtggctc tgtatattct 1750
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taaaagaaag taatggaag 1819

<210> 40
<211> 204
<212> PRT
<213> Homo Sapien

<400> 40
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Leu Asn Leu Leu Tyr Thr Leu Val Ser Leu Leu Leu Ile Gly Ile
20 25 30
Ala Ala Trp Gly Ile Gly Phe Gly Leu Ile Ser Ser Leu Arg Val
35 40 45
Val Gly Val Val Ile Ala Val Gly Ile Phe Leu Phe Leu Ile Ala
50 55 60
Leu Val Gly Leu Ile Gly Ala Val Lys His His Gln Val Leu Leu
65 70 75
Phe Phe Tyr Met Ile Ile Leu Leu Leu Val Phe Ile Val Gln Phe
80 85 90
Ser Val Ser Cys Ala Cys Leu Ala Leu Asn Gln Glu Gln Gln Gly
95 100 105
Gln Leu Leu Glu Val Gly Trp Asn Asn Thr Ala Ser Ala Arg Asn
110 115 120
Asp Ile Gln Arg Asn Leu Asn Cys Cys Gly Phe Arg Ser Val Asn
125 130 135
Pro Asn Asp Thr Cys Leu Ala Ser Cys Val Lys Ser Asp His Ser
140 145 150

Cys Ser Pro Cys Ala Pro Ile Ile Gly Glu Tyr Ala Gly Glu Val
155 160 165

Leu Arg Phe Val Gly Gly Ile Gly Leu Phe Phe Ser Phe Thr Glu
170 175 180

Ile Leu Gly Val Trp Leu Thr Tyr Arg Tyr Arg Asn Gln Lys Asp
185 190 195

Pro Arg Ala Asn Pro Ser Ala Phe Leu
200

<210> 41
<211> 2061
<212> DNA
<213> Homo Sapien

<400> 41
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gacgctgcag tgtgaggac ctgtctgcac tgaggagagc agctgccaca 150
cggaggatga cttgactgat gcaagggaag ctggcttcca ggtcaaggcc 200
tacactttca gtgaaccctt ccacctgatt gtgtcctatg actggctgat 250
cctccaaggt ccagccaagc cagtttttga aggggacctg ctggttctgc 300
gctgccaggc ctggcaagac tggccactga ctcagggtgac cttctaccga 350
gatggctcag ctctgggtcc ccccgggcct aacagggaat tctccatcac 400
cgtggtacaa aaggcagaca gcgggcacta ccaactgcagt ggcattcttc 450
agagccctgg tcctgggatc ccagaaacag catctgttgt ggctatcaca 500
gtccaagaac tgtttccagc gccaatctc agagctgtac cctcagctga 550
acccaagca ggaagcccca tgaccctgag ttgtcagaca aagttgcccc 600
tgcagaggtc agctgcccgc ctctcttct cttctacaa ggatggaagg 650
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agaagatcac tccgggtcat actggtgtga ggcagccact gaggacaacc 750
aagtttgaa acagagcccc cagctagaga tcagagtga ggtgcttc 800
agctctgctg cacctccac attgaatcca gctcctcaga aatcagctgc 850
tccaggaact gctcctgagg aggccctgg gcctctgcct ccgccgcaa 900
cccatcttc tgaggatcca ggcttttctt ctctctggg gatgccagat 950
cctcatctgt atcaccagat gggccttctt ctcaaacaca tgcaggatgt 1000

Cys	His	Thr	Glu	Asp	Asp	Leu	Thr	Asp	Ala	Arg	Glu	Ala	Gly	Phe	50	55	60
Gln	Val	Lys	Ala	Tyr	Thr	Phe	Ser	Glu	Pro	Phe	His	Leu	Ile	Val	65	70	75
Ser	Tyr	Asp	Trp	Leu	Ile	Leu	Gln	Gly	Pro	Ala	Lys	Pro	Val	Phe	80	85	90
Glu	Gly	Asp	Leu	Leu	Val	Leu	Arg	Cys	Gln	Ala	Trp	Gln	Asp	Trp	95	100	105
Pro	Leu	Thr	Gln	Val	Thr	Phe	Tyr	Arg	Asp	Gly	Ser	Ala	Leu	Gly	110	115	120
Pro	Pro	Gly	Pro	Asn	Arg	Glu	Phe	Ser	Ile	Thr	Val	Val	Gln	Lys	125	130	135
Ala	Asp	Ser	Gly	His	Tyr	His	Cys	Ser	Gly	Ile	Phe	Gln	Ser	Pro	140	145	150
Gly	Pro	Gly	Ile	Pro	Glu	Thr	Ala	Ser	Val	Val	Ala	Ile	Thr	Val	155	160	165
Gln	Glu	Leu	Phe	Pro	Ala	Pro	Ile	Leu	Arg	Ala	Val	Pro	Ser	Ala	170	175	180
Glu	Pro	Gln	Ala	Gly	Ser	Pro	Met	Thr	Leu	Ser	Cys	Gln	Thr	Lys	185	190	195
Leu	Pro	Leu	Gln	Arg	Ser	Ala	Ala	Arg	Leu	Leu	Phe	Ser	Phe	Tyr	200	205	210
Lys	Asp	Gly	Arg	Ile	Val	Gln	Ser	Arg	Gly	Leu	Ser	Ser	Glu	Phe	215	220	225
Gln	Ile	Pro	Thr	Ala	Ser	Glu	Asp	His	Ser	Gly	Ser	Tyr	Trp	Cys	230	235	240
Glu	Ala	Ala	Thr	Glu	Asp	Asn	Gln	Val	Trp	Lys	Gln	Ser	Pro	Gln	245	250	255
Leu	Glu	Ile	Arg	Val	Gln	Gly	Ala	Ser	Ser	Ser	Ala	Ala	Pro	Pro	260	265	270
Thr	Leu	Asn	Pro	Ala	Pro	Gln	Lys	Ser	Ala	Ala	Pro	Gly	Thr	Ala	275	280	285
Pro	Glu	Glu	Ala	Pro	Gly	Pro	Leu	Pro	Pro	Pro	Pro	Thr	Pro	Ser	290	295	300
Ser	Glu	Asp	Pro	Gly	Phe	Ser	Ser	Pro	Leu	Gly	Met	Pro	Asp	Pro	305	310	315
His	Leu	Tyr	His	Gln	Met	Gly	Leu	Leu	Leu	Lys	His	Met	Gln	Asp	320	325	330
Val	Arg	Val	Leu	Leu	Gly	His	Leu	Leu	Met	Glu	Leu	Arg	Glu	Leu			

335

340

345

Ser Gly His Gln Lys Pro Gly Thr Thr Lys Ala Thr Ala Glu
350 355

<210> 43

<211> 2168

<212> DNA

<213> Homo Sapien

<400> 43

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acttccctct gtgaccatga aactctgggt gtctgcattg ctgatggcct 200
ggtttgggtg cctgagctgt gtgcaggccg aattcttcac ctctattggg 250
cacatgactg acctgattta tgcagagaaa gagctggtgc agtctctgaa 300
agagtacatc cttgtggagg aagccaagct ttccaagatt aagagctggg 350
ccaacaaaat ggaagccttg actagcaagt cagctgctga tgctgagggc 400
tacctggctc accctgtgaa tgctacaaa ctggtgaagc ggctaaacac 450
agactggcct gcgctggagg accttgtcct gcaggactca gctgcagggt 500
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gagataggag ctgccaaagc cctgatgaga cttcaggaca catacaggct 600
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caatgctgag tgtggatgac tgctttggga tgggccgctc ggccatacat 700
gaaggggact attatcatat ggtgttgtgg atggagcagg tgctaaagca 750
gcttgatgcc ggggaggagg ccaccacaac caagtcacag gtgctggact 800
acctcagcta tgctgtcttc cagttgggtg atctgcaccg tgccctggag 850
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<210> 44
<211> 533
<212> PRT
<213> Homo Sapien

<400> 44
Met Lys Leu Trp Val Ser Ala Leu Leu Met Ala Trp Phe Gly Val
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Leu Ser Cys Val Gln Ala Glu Phe Phe Thr Ser Ile Gly His Met
20 25 30
Thr Asp Leu Ile Tyr Ala Glu Lys Glu Leu Val Gln Ser Leu Lys
35 40 45
Glu Tyr Ile Leu Val Glu Glu Ala Lys Leu Ser Lys Ile Lys Ser
50 55 60

350	355	360
Leu Ala Arg Ala Thr Val Arg Asp Pro Lys Thr Gly Val Leu Thr		
365	370	375
Val Ala Ser Tyr Arg Val Ser Lys Ser Ser Trp Leu Glu Glu Asp		
380	385	390
Asp Asp Pro Val Val Ala Arg Val Asn Arg Arg Met Gln His Ile		
395	400	405
Thr Gly Leu Thr Val Lys Thr Ala Glu Leu Leu Gln Val Ala Asn		
410	415	420
Tyr Gly Val Gly Gly Gln Tyr Glu Pro His Phe Asp Phe Ser Arg		
425	430	435
Arg Pro Phe Asp Ser Gly Leu Lys Thr Glu Gly Asn Arg Leu Ala		
440	445	450
Thr Phe Leu Asn Tyr Met Ser Asp Val Glu Ala Gly Gly Ala Thr		
455	460	465
Val Phe Pro Asp Leu Gly Ala Ala Ile Trp Pro Lys Lys Gly Thr		
470	475	480
Ala Val Phe Trp Tyr Asn Leu Leu Arg Ser Gly Glu Gly Asp Tyr		
485	490	495
Arg Thr Arg His Ala Ala Cys Pro Val Leu Val Gly Cys Lys Trp		
500	505	510
Val Ser Asn Lys Trp Phe His Glu Arg Gly Gln Glu Phe Leu Arg		
515	520	525
Pro Cys Gly Ser Thr Glu Val Asp		
530		

<210> 45
 <211> 2403
 <212> DNA
 <213> Homo Sapien

<400> 45
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 cgcctccccg cgggtgcggg ttgcacaccg atcctgggct tcgctcgatt 200
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 caagcagtgt ccacagcaca tccaccaaca ggtaaacgac taaagaaaac 850
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gtaacatttt gacaactgaa agaaaaagta caaggggatc cagtgtgtaa 2100
attgtattct cataatactg aaatgcttta gcatactaga atcagatata 2150
aaactattaa gtatgtcaac agccatttag gcaaataagc actccttta 2200
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ctgaggcttc ataatcatgg ctcttagaaa ctcaggaaag aggagataat 2300
gtggattaata accttaagag ttctaaccat gcctactaaa tgtacagata 2350
tgcaaattcc atagctcaat aaaagaatct gatacttaga ccaaaaaaaaa 2400
aaa 2403

<210> 46
<211> 550
<212> PRT
<213> Homo Sapien

<400> 46
Met Ser Ala Ala Trp Ile Pro Ala Leu Gly Leu Gly Val Cys Leu
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Leu Leu Leu Pro Gly Pro Ala Gly Ser Glu Gly Ala Ala Pro Ile
20 25 30
Ala Ile Thr Cys Phe Thr Arg Gly Leu Asp Ile Arg Lys Glu Lys
35 40 45
Ala Asp Val Leu Cys Pro Gly Gly Cys Pro Leu Glu Glu Phe Ser
50 55 60
Val Tyr Gly Asn Ile Val Tyr Ala Ser Val Ser Ser Ile Cys Gly
65 70 75
Ala Ala Val His Arg Gly Val Ile Ser Asn Ser Gly Gly Pro Val
80 85 90
Arg Val Tyr Ser Leu Pro Gly Arg Glu Asn Tyr Ser Ser Val Asp
95 100 105
Ala Asn Gly Ile Gln Ser Gln Met Leu Ser Arg Trp Ser Ala Ser
110 115 120
Phe Thr Val Thr Lys Gly Lys Ser Ser Thr Gln Glu Ala Thr Gly
125 130 135

Gln	Ala	Val	Ser	Thr 140	Ala	His	Pro	Pro	Thr 145	Gly	Lys	Arg	Leu	Lys 150
Lys	Thr	Pro	Glu	Lys 155	Lys	Thr	Gly	Asn	Lys 160	Asp	Cys	Lys	Ala	Asp 165
Ile	Ala	Phe	Leu	Ile 170	Asp	Gly	Ser	Phe	Asn 175	Ile	Gly	Gln	Arg	Arg 180
Phe	Asn	Leu	Gln	Lys 185	Asn	Phe	Val	Gly	Lys 190	Val	Ala	Leu	Met	Leu 195
Gly	Ile	Gly	Thr	Glu 200	Gly	Pro	His	Val	Gly 205	Leu	Val	Gln	Ala	Ser 210
Glu	His	Pro	Lys	Ile 215	Glu	Phe	Tyr	Leu	Lys 220	Asn	Phe	Thr	Ser	Ala 225
Lys	Asp	Val	Leu	Phe 230	Ala	Ile	Lys	Glu	Val 235	Gly	Phe	Arg	Gly	Gly 240
Asn	Ser	Asn	Thr	Gly 245	Lys	Ala	Leu	Lys	His 250	Thr	Ala	Gln	Lys	Phe 255
Phe	Thr	Val	Asp	Ala 260	Gly	Val	Arg	Lys	Gly 265	Ile	Pro	Lys	Val	Val 270
Val	Val	Phe	Ile	Asp 275	Gly	Trp	Pro	Ser	Asp 280	Asp	Ile	Glu	Glu	Ala 285
Gly	Ile	Val	Ala	Arg 290	Glu	Phe	Gly	Val	Asn 295	Val	Phe	Ile	Val	Ser 300
Val	Ala	Lys	Pro	Ile 305	Pro	Glu	Glu	Leu	Gly 310	Met	Val	Gln	Asp	Val 315
Thr	Phe	Val	Asp	Lys 320	Ala	Val	Cys	Arg	Asn 325	Asn	Gly	Phe	Phe	Ser 330
Tyr	His	Met	Pro	Asn 335	Trp	Phe	Gly	Thr	Thr 340	Lys	Tyr	Val	Lys	Pro 345
Leu	Val	Gln	Lys	Leu 350	Cys	Thr	His	Glu	Gln 355	Met	Met	Cys	Ser	Lys 360
Thr	Cys	Tyr	Asn	Ser 365	Val	Asn	Ile	Ala	Phe 370	Leu	Ile	Asp	Gly	Ser 375
Ser	Ser	Val	Gly	Asp 380	Ser	Asn	Phe	Arg	Leu 385	Met	Leu	Glu	Phe	Val 390
Ser	Asn	Ile	Ala	Lys 395	Thr	Phe	Glu	Ile	Ser 400	Asp	Ile	Gly	Ala	Lys 405
Ile	Ala	Ala	Val	Gln 410	Phe	Thr	Tyr	Asp	Gln 415	Arg	Thr	Glu	Phe	Ser 420
Phe	Thr	Asp	Tyr	Ser	Thr	Lys	Glu	Asn	Val	Leu	Ala	Val	Ile	Arg

425	430	435
Asn Ile Arg Tyr Met Ser Gly Gly Thr Ala Thr Gly Asp Ala Ile		
440	445	450
Ser Phe Thr Val Arg Asn Val Phe Gly Pro Ile Arg Glu Ser Pro		
455	460	465
Asn Lys Asn Phe Leu Val Ile Val Thr Asp Gly Gln Ser Tyr Asp		
470	475	480
Asp Val Gln Gly Pro Ala Ala Ala Ala His Asp Ala Gly Ile Thr		
485	490	495
Ile Phe Ser Val Gly Val Ala Trp Ala Pro Leu Asp Asp Leu Lys		
500	505	510
Asp Met Ala Ser Lys Pro Lys Glu Ser His Ala Phe Phe Thr Arg		
515	520	525
Glu Phe Thr Gly Leu Glu Pro Ile Val Ser Asp Val Ile Arg Gly		
530	535	540
Ile Cys Arg Asp Phe Leu Glu Ser Gln Gln		
545	550	

<210> 47

<211> 1901

<212> DNA

<213> Homo Sapien

<400> 47

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ccgtgagccg cctcatcttc acgttcttcc tcttcctggg ggtgctgggtg 200

tccatcatta tgctgagccc gggcgtggag agtcagctct acaagctgcc 250

ctgggtgtgt gaggaggggg ccgggatccc caccgtcctg cagggccaca 300

tcgactgtgg ctccctgctt ggctaccgag ctgtctaccg catgtgcttc 350

gccacggcgg ccttcttctt cttctttttt accctgctca tgctctgcgt 400

gagcagcagc cgggaccccc gggctgccat ccagaatggg ttttggttct 450

ttaagttcct gatcctgggtg ggcctcaccg tgggtgcctt ctacatccct 500

gacggctcct tcaccaacat ctggttctac ttcggcgtcg tgggctcctt 550

cctcttcac ctcacccagc tgggtgctgt catcgacttt ggcactcct 600

ggaaccagcg gtggctgggc aaggccgagg agtgcgattc ccgtgcctgg 650

Met	Gly	Ala	Cys	Leu	Gly	Ala	Cys	Ser	Leu	Leu	Ser	Cys	Ala	Ser
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Cys	Leu	Cys	Gly	Ser	Ala	Pro	Cys	Ile	Leu	Cys	Ser	Cys	Cys	Pro
				20					25					30
Ala	Ser	Arg	Asn	Ser	Thr	Val	Ser	Arg	Leu	Ile	Phe	Thr	Phe	Phe
				35					40					45
Leu	Phe	Leu	Gly	Val	Leu	Val	Ser	Ile	Ile	Met	Leu	Ser	Pro	Gly
				50					55					60
Val	Glu	Ser	Gln	Leu	Tyr	Lys	Leu	Pro	Trp	Val	Cys	Glu	Glu	Gly
				65					70					75
Ala	Gly	Ile	Pro	Thr	Val	Leu	Gln	Gly	His	Ile	Asp	Cys	Gly	Ser
				80					85					90
Leu	Leu	Gly	Tyr	Arg	Ala	Val	Tyr	Arg	Met	Cys	Phe	Ala	Thr	Ala
				95					100					105
Ala	Phe	Phe	Phe	Phe	Phe	Phe	Thr	Leu	Leu	Met	Leu	Cys	Val	Ser
				110					115					120
Ser	Ser	Arg	Asp	Pro	Arg	Ala	Ala	Ile	Gln	Asn	Gly	Phe	Trp	Phe
				125					130					135
Phe	Lys	Phe	Leu	Ile	Leu	Val	Gly	Leu	Thr	Val	Gly	Ala	Phe	Tyr
				140					145					150
Ile	Pro	Asp	Gly	Ser	Phe	Thr	Asn	Ile	Trp	Phe	Tyr	Phe	Gly	Val
				155					160					165
Val	Gly	Ser	Phe	Leu	Phe	Ile	Leu	Ile	Gln	Leu	Val	Leu	Leu	Ile
				170					175					180
Asp	Phe	Ala	His	Ser	Trp	Asn	Gln	Arg	Trp	Leu	Gly	Lys	Ala	Glu
				185					190					195
Glu	Cys	Asp	Ser	Arg	Ala	Trp	Tyr	Ala	Gly	Leu	Phe	Phe	Phe	Thr
				200					205					210
Leu	Leu	Phe	Tyr	Leu	Leu	Ser	Ile	Ala	Ala	Val	Ala	Leu	Met	Phe
				215					220					225
Met	Tyr	Tyr	Thr	Glu	Pro	Ser	Gly	Cys	His	Glu	Gly	Lys	Val	Phe
				230					235					240
Ile	Ser	Leu	Asn	Leu	Thr	Phe	Cys	Val	Cys	Val	Ser	Ile	Ala	Ala
				245					250					255
Val	Leu	Pro	Lys	Val	Gln	Asp	Ala	Gln	Pro	Asn	Ser	Gly	Leu	Leu
				260					265					270
Gln	Ala	Ser	Val	Ile	Thr	Leu	Tyr	Thr	Met	Phe	Val	Thr	Trp	Ser
				275					280					285
Ala	Leu	Ser	Ser	Ile	Pro	Glu	Gln	Lys	Cys	Asn	Pro	His	Leu	Pro

290	295	300
Thr Gln Leu Gly Asn Glu Thr Val Val	Ala Gly Pro Glu Gly Tyr	
305	310	315
Glu Thr Gln Trp Trp Asp Ala Pro Ser	Ile Val Gly Leu Ile Ile	
320	325	330
Phe Leu Leu Cys Thr Leu Phe Ile Ser	Leu Arg Ser Ser Asp His	
335	340	345
Arg Gln Val Asn Ser Leu Met Gln Thr	Glu Glu Cys Pro Pro Met	
350	355	360
Leu Asp Ala Thr Gln Gln Gln Gln Gln	Gln Val Ala Ala Cys Glu	
365	370	375
Gly Arg Ala Phe Asp Asn Glu Gln Asp	Gly Val Thr Tyr Ser Tyr	
380	385	390
Ser Phe Phe His Phe Cys Leu Val Leu	Ala Ser Leu His Val Met	
395	400	405
Met Thr Leu Thr Asn Trp Tyr Lys Pro	Gly Glu Thr Arg Lys Met	
410	415	420
Ile Ser Thr Trp Thr Ala Val Trp Val	Lys Ile Cys Ala Ser Trp	
425	430	435
Ala Gly Leu Leu Leu Tyr Leu Trp Thr	Leu Val Ala Pro Leu Leu	
440	445	450
Leu Arg Asn Arg Asp Phe Ser		
455		

<210> 49
 <211> 1638
 <212> DNA
 <213> Homo Sapien

<400> 49
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 agtgagccct tacagtgcc cctggaaacc cacttggcct gcataccgcc 200
 tccctgtcgt cttgccccag tctaccctca atttagccaa gccagacttt 250
 ggagccgaag ccaaattaga agtatcttct tcatgtggac cccagtgtca 300
 taagggaact ccaactgcca cttacgaaga ggccaagcaa tatctgtctt 350
 atgaaacgct ctatgccaat ggcagccgca cagagacgca ggtgggcatc 400
 tacatcctca gcagtagtgg agatggggcc caacaccgag actcagggtc 450

				20					25					30
Thr	Trp	Pro	Ala	Tyr 35	Arg	Leu	Pro	Val	Val 40	Leu	Pro	Gln	Ser	Thr 45
Leu	Asn	Leu	Ala	Lys 50	Pro	Asp	Phe	Gly	Ala 55	Glu	Ala	Lys	Leu	Glu 60
Val	Ser	Ser	Ser	Cys 65	Gly	Pro	Gln	Cys	His 70	Lys	Gly	Thr	Pro	Leu 75
Pro	Thr	Tyr	Glu	Glu 80	Ala	Lys	Gln	Tyr	Leu 85	Ser	Tyr	Glu	Thr	Leu 90
Tyr	Ala	Asn	Gly	Ser 95	Arg	Thr	Glu	Thr	Gln 100	Val	Gly	Ile	Tyr	Ile 105
Leu	Ser	Ser	Ser	Gly 110	Asp	Gly	Ala	Gln	His 115	Arg	Asp	Ser	Gly	Ser 120
Ser	Gly	Lys	Ser	Arg 125	Arg	Lys	Arg	Gln	Ile 130	Tyr	Gly	Tyr	Asp	Ser 135
Arg	Phe	Ser	Ile	Phe 140	Gly	Lys	Asp	Phe	Leu 145	Leu	Asn	Tyr	Pro	Phe 150
Ser	Thr	Ser	Val	Lys 155	Leu	Ser	Thr	Gly	Cys 160	Thr	Gly	Thr	Leu	Val 165
Ala	Glu	Lys	His	Val 170	Leu	Thr	Ala	Ala	His 175	Cys	Ile	His	Asp	Gly 180
Lys	Thr	Tyr	Val	Lys 185	Gly	Thr	Gln	Lys	Leu 190	Arg	Val	Gly	Phe	Leu 195
Lys	Pro	Lys	Phe	Lys 200	Asp	Gly	Gly	Arg	Gly 205	Ala	Asn	Asp	Ser	Thr 210
Ser	Ala	Met	Pro	Glu 215	Gln	Met	Lys	Phe	Gln 220	Trp	Ile	Arg	Val	Lys 225
Arg	Thr	His	Val	Pro 230	Lys	Gly	Trp	Ile	Lys 235	Gly	Asn	Ala	Asn	Asp 240
Ile	Gly	Met	Asp	Tyr 245	Asp	Tyr	Ala	Leu	Leu 250	Glu	Leu	Lys	Lys	Pro 255
His	Lys	Arg	Lys	Phe 260	Met	Lys	Ile	Gly	Val 265	Ser	Pro	Pro	Ala	Lys 270
Gln	Leu	Pro	Gly	Gly 275	Arg	Ile	His	Phe	Ser 280	Gly	Tyr	Asp	Asn	Asp 285
Arg	Pro	Gly	Asn	Leu 290	Val	Tyr	Arg	Phe	Cys 295	Asp	Val	Lys	Asp	Glu 300
Thr	Tyr	Asp	Leu	Leu 305	Tyr	Gln	Gln	Cys	Asp 310	Ala	Gln	Pro	Gly	Ala 315

Ser	Gly	Ser	Gly	Val	Tyr	Val	Arg	Met	Trp	Lys	Arg	Gln	Gln	Gln
				320					325					330
Lys	Trp	Glu	Arg	Lys	Ile	Ile	Gly	Ile	Phe	Ser	Gly	His	Gln	Trp
				335					340					345
Val	Asp	Met	Asn	Gly	Ser	Pro	Gln	Asp	Phe	Asn	Val	Ala	Val	Arg
				350					355					360
Ile	Thr	Pro	Leu	Lys	Tyr	Ala	Gln	Ile	Cys	Tyr	Trp	Ile	Lys	Gly
				365					370					375
Asn	Tyr	Leu	Asp	Cys	Arg	Glu	Gly							
				380										

<210> 51
 <211> 3003
 <212> DNA
 <213> Homo Sapien

<400> 51
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 gggttcctcg agactctcag aggggcgcct cccatcggcg cccaccaccc 150
 caacctgttc ctgcgcgcc actgcgtgc gcccaggac ccgctgcca 200
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 ggtgaatgta tcggggccaaa caagtgcagg tgtcatcctg gttatgctgg 450
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 gcttcgatct catgtatatt ggaggcaaat atcaatgtca tgacatagac 850
 gaatgtcac ttggtcagta tcagtgcagc agctttgctc gatgttataa 900
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 aat 3003

<210> 52
 <211> 509
 <212> PRT
 <213> Homo Sapien

<400> 52
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 20 25 30
 Ser Ser Ile Gly Leu Cys Arg Tyr Gly Gly Arg Ile Asp Cys Cys
 35 40 45
 Trp Gly Trp Ala Arg Gln Ser Trp Gly Gln Cys Gln Pro Val Cys
 50 55 60
 Gln Pro Arg Cys Lys His Gly Glu Cys Ile Gly Pro Asn Lys Cys
 65 70 75
 Lys Cys His Pro Gly Tyr Ala Gly Lys Thr Cys Asn Gln Asp Leu
 80 85 90
 Asn Glu Cys Gly Leu Lys Pro Arg Pro Cys Lys His Arg Cys Met
 95 100 105
 Asn Thr Tyr Gly Ser Tyr Lys Cys Tyr Cys Leu Asn Gly Tyr Met
 110 115 120
 Leu Met Pro Asp Gly Ser Cys Ser Ser Ala Leu Thr Cys Ser Met
 125 130 135

	425		430		435
Ala Ala Arg Leu Val Leu Pro Leu Gly Arg Leu Met His Ser Gly					
	440		445		450
Asp Leu Cys Leu Ser Phe Arg His Lys Val Thr Gly Leu His Ser					
	455		460		465
Gly Thr Leu Gln Val Phe Val Arg Lys His Gly Ala His Gly Ala					
	470		475		480
Ala Leu Trp Gly Arg Asn Gly Gly His Gly Trp Arg Gln Thr Gln					
	485		490		495
Ile Thr Leu Arg Gly Ala Asp Ile Lys Ser Glu Ser Gln Arg					
	500		505		

<210> 53
 <211> 1998
 <212> DNA
 <213> Homo Sapien

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 gatgctgcgt cggcggggca gccctggcat ggggtgtgcat gtgggtgcag 200
 ccctgggagc actgtggttc tgccctcacag gagccctgga ggtccaggtc 250
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 ggcagctgac agatacaaaa cagctgggtgc acagctttgc tgagggccag 400
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 agggcagctt cacctgcttc gtgagcatcc gggatttcgg cagcgtgcc 550
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 acttctaatt taaatgtggg actcggaggg attttgtaaa ctgggggtat 1950
 attttgggga aaataaatgt ctttgtaaaa aaaaaaaaaa aaaaaaaa 1998

<210> 54

<211> 316

<212> PRT

<213> Homo Sapien

<220>

<221> unsure

<222> 233

<223> unknown amino acid

<400> 54

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Val	Gln	Val	Pro	Glu	Asp	Pro	Val	Val	Ala	Leu	Val	Gly	Thr	Asp	35	40	45
Ala	Thr	Leu	Cys	Cys	Ser	Phe	Ser	Pro	Glu	Pro	Gly	Phe	Ser	Leu	50	55	60
Ala	Gln	Leu	Asn	Leu	Ile	Trp	Gln	Leu	Thr	Asp	Thr	Lys	Gln	Leu	65	70	75
Val	His	Ser	Phe	Ala	Glu	Gly	Gln	Asp	Gln	Gly	Ser	Ala	Tyr	Ala	80	85	90
Asn	Arg	Thr	Ala	Leu	Phe	Pro	Asp	Leu	Leu	Ala	Gln	Gly	Asn	Ala	95	100	105
Ser	Leu	Arg	Leu	Gln	Arg	Val	Arg	Val	Ala	Asp	Glu	Gly	Ser	Phe	110	115	120
Thr	Cys	Phe	Val	Ser	Ile	Arg	Asp	Phe	Gly	Ser	Ala	Ala	Val	Ser	125	130	135
Leu	Gln	Val	Ala	Ala	Pro	Tyr	Ser	Lys	Pro	Ser	Met	Thr	Leu	Glu	140	145	150
Pro	Asn	Lys	Asp	Leu	Arg	Pro	Gly	Asp	Thr	Val	Thr	Ile	Thr	Cys	155	160	165
Ser	Ser	Tyr	Gln	Gly	Tyr	Pro	Glu	Ala	Glu	Val	Phe	Trp	Gln	Asp	170	175	180
Gly	Gln	Gly	Val	Pro	Leu	Thr	Gly	Asn	Val	Thr	Thr	Ser	Gln	Met	185	190	195
Ala	Asn	Glu	Gln	Gly	Leu	Phe	Asp	Val	His	Ser	Val	Leu	Arg	Val	200	205	210
Val	Leu	Gly	Ala	Asn	Gly	Thr	Tyr	Ser	Cys	Leu	Val	Arg	Asn	Pro	215	220	225
Val	Leu	Gln	Gln	Asp	Ala	His	Xaa	Ser	Val	Thr	Ile	Thr	Gly	Gln	230	235	240
Pro	Met	Thr	Phe	Pro	Pro	Glu	Ala	Leu	Trp	Val	Thr	Val	Gly	Leu	245	250	255
Ser	Val	Cys	Leu	Ile	Ala	Leu	Leu	Val	Ala	Leu	Ala	Phe	Val	Cys	260	265	270
Trp	Arg	Lys	Ile	Lys	Gln	Ser	Cys	Glu	Glu	Glu	Asn	Ala	Gly	Ala	275	280	285
Glu	Asp	Gln	Asp	Gly	Glu	Gly	Glu	Gly	Ser	Lys	Thr	Ala	Leu	Gln	290	295	300
Pro	Leu	Lys	His	Ser	Asp	Ser	Lys	Glu	Asp	Asp	Gly	Gln	Glu	Ile			

Ala

<210> 55

<211> 1892

<212> DNA

<213> Homo Sapien

<400> 55

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<210> 56
 <211> 566
 <212> PRT
 <213> Homo Sapien

<400> 56
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 35 40 45
 Gln Tyr Thr Leu Val Pro Val Ser Gly Trp Gln Glu Leu Glu Thr
 50 55 60
 Ala Phe Leu Glu His Lys Glu Gln Phe His Tyr Phe Ile Leu Ile
 65 70 75
 Asn Cys Gly Ala Asn Val Asp Leu Leu Asp Ile Leu Gln Pro Asp
 80 85 90
 Glu Asp Thr Ile Phe Phe Val Cys Asp Ser His Arg Pro Val Asn
 95 100 105
 Val Val Asn Val Tyr Asn Asp Thr Gln Ile Lys Leu Leu Ile Lys
 110 115 120

Gln	Asp	Asp	Asp	Leu 125	Glu	Val	Pro	Ala	Tyr 130	Glu	Asp	Ile	Phe	Arg 135
Asp	Glu	Glu	Glu	Asp 140	Glu	Glu	His	Ser	Gly 145	Asn	Asp	Ser	Asp	Gly 150
Ser	Glu	Pro	Ser	Glu 155	Lys	Arg	Thr	Arg	Leu 160	Glu	Glu	Glu	Ile	Val 165
Glu	Gln	Thr	Met	Arg 170	Arg	Arg	Gln	Arg	Arg 175	Glu	Trp	Glu	Ala	Arg 180
Arg	Arg	Asp	Ile	Leu 185	Phe	Asp	Tyr	Glu	Gln 190	Tyr	Glu	Tyr	His	Gly 195
Thr	Ser	Ser	Ala	Met 200	Val	Met	Phe	Glu	Leu 205	Ala	Trp	Met	Leu	Ser 210
Lys	Asp	Leu	Asn	Asp 215	Met	Leu	Trp	Trp	Ala 220	Ile	Val	Gly	Leu	Thr 225
Asp	Gln	Trp	Val	Gln 230	Asp	Lys	Ile	Thr	Gln 235	Met	Lys	Tyr	Val	Thr 240
Asp	Val	Gly	Val	Leu 245	Gln	Arg	His	Val	Ser 250	Arg	His	Asn	His	Arg 255
Asn	Glu	Asp	Glu	Glu 260	Asn	Thr	Leu	Ser	Val 265	Asp	Cys	Thr	Arg	Ile 270
Ser	Phe	Glu	Tyr	Asp 275	Leu	Arg	Leu	Val	Leu 280	Tyr	Gln	His	Trp	Ser 285
Leu	His	Asp	Ser	Leu 290	Cys	Asn	Thr	Ser	Tyr 295	Thr	Ala	Ala	Arg	Phe 300
Lys	Leu	Trp	Ser	Val 305	His	Gly	Gln	Lys	Arg 310	Leu	Gln	Glu	Phe	Leu 315
Ala	Asp	Met	Gly	Leu 320	Pro	Leu	Lys	Gln	Val 325	Lys	Gln	Lys	Phe	Gln 330
Ala	Met	Asp	Ile	Ser 335	Leu	Lys	Glu	Asn	Leu 340	Arg	Glu	Met	Ile	Glu 345
Glu	Ser	Ala	Asn	Lys 350	Phe	Gly	Met	Lys	Asp 355	Met	Arg	Val	Gln	Thr 360
Phe	Ser	Ile	His	Phe 365	Gly	Phe	Lys	His	Lys 370	Phe	Leu	Ala	Ser	Asp 375
Val	Val	Phe	Ala	Thr 380	Met	Ser	Leu	Met	Glu 385	Ser	Pro	Glu	Lys	Asp 390
Gly	Ser	Gly	Thr	Asp 395	His	Phe	Ile	Gln	Ala 400	Leu	Asp	Ser	Leu	Ser 405
Arg	Ser	Asn	Leu	Asp	Lys	Leu	Tyr	His	Gly	Leu	Glu	Leu	Ala	Lys

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Lys Gln Leu Arg Ala Thr Gln Gln Thr	Ile Ala Ser Cys Leu Cys	
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Thr Asn Leu Val Ile Ser Gln Gly Pro	Phe Leu Tyr Cys Ser Leu	
440	445	450
Met Glu Gly Thr Pro Asp Val Met Leu	Phe Ser Arg Pro Ala Ser	
455	460	465
Leu Ser Leu Leu Ser Lys His Leu Leu	Lys Ser Phe Val Cys Ser	
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Thr Lys Asn Arg Arg Cys Lys Leu Leu	Pro Leu Val Met Ala Ala	
485	490	495
Pro Leu Ser Met Glu His Gly Thr Val	Thr Val Val Gly Ile Pro	
500	505	510
Pro Glu Thr Asp Ser Ser Asp Arg Lys	Asn Phe Phe Gly Arg Ala	
515	520	525
Phe Glu Lys Ala Ala Glu Ser Thr Ser	Ser Arg Met Leu His Asn	
530	535	540
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<210> 57

<211> 2456

<212> DNA

<213> Homo Sapien

<400> 57

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<210> 58
<211> 545
<212> PRT
<213> Homo Sapien

<400> 58
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35 40 45
Asn Leu Gly Ser Thr Ser Thr Pro Ala Thr Thr Ser Ala Pro Ser
50 55 60
Ser Gly Phe Gly Thr Gly Leu Phe Gly Ser Lys Pro Ala Thr Gly
65 70 75
Phe Thr Leu Gly Gly Thr Asn Thr Gly Ala Leu His Thr Lys Arg
80 85 90
Pro Gln Val Val Thr Lys Tyr Gly Thr Leu Gln Gly Lys Gln Met
95 100 105
His Val Gly Lys Thr Pro Ile Gln Val Phe Leu Gly Val Pro Phe
110 115 120
Ser Arg Pro Pro Leu Gly Ile Leu Arg Phe Ala Pro Pro Glu Pro
125 130 135
Pro Glu Pro Trp Lys Gly Ile Arg Asp Ala Thr Thr Tyr Pro Pro
140 145 150

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Leu Gly Val Asn Asn Leu Glu Phe Asn Trp Leu Leu Pro Tyr Asn		
455	460	465
Ile Thr Lys Glu Gln Val Pro Leu Val Val Glu Glu Tyr Leu Asp		
470	475	480
Asn Val Asn Glu His Asp Trp Lys Met Leu Arg Asn Arg Met Met		
485	490	495
Asp Ile Val Gln Asp Ala Thr Phe Val Tyr Ala Thr Leu Gln Thr		
500	505	510
Ala His Tyr His Arg Glu Thr Pro Met Met Gly Ile Cys Pro Ala		
515	520	525
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Pro Gln Glu Trp Ala		
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 <211> 2331
 <212> DNA
 <213> Homo Sapien

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<210> 60
 <211> 694
 <212> PRT
 <213> Homo Sapien

<400> 60
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 Asp Gly Leu Arg Val Pro Arg Gln Val Arg Leu Leu Gln Arg Leu
 35 40 45
 Lys Thr Lys Pro Leu Met Thr Glu Phe Ser Val Lys Ser Thr Ile
 50 55 60
 Ile Ser Arg Tyr Ala Phe Thr Thr Val Ser Cys Arg Met Leu Asn
 65 70 75
 Arg Ala Ser Glu Asp Gln Asp Ile Glu Phe Gln Met Gln Ile Pro
 80 85 90
 Ala Ala Ala Phe Ile Thr Asn Phe Thr Met Leu Ile Gly Asp Lys
 95 100 105
 Val Tyr Gln Gly Glu Ile Thr Glu Arg Glu Lys Lys Ser Gly Asp
 110 115 120
 Arg Val Lys Glu Lys Arg Asn Lys Thr Thr Glu Glu Asn Gly Glu
 125 130 135
 Lys Gly Thr Glu Ile Phe Arg Ala Ser Ala Val Ile Pro Ser Lys
 140 145 150
 Asp Lys Ala Ala Phe Phe Leu Ser Tyr Glu Glu Leu Leu Gln Arg
 155 160 165
 Arg Leu Gly Lys Tyr Glu His Ser Ile Ser Val Arg Pro Gln Gln
 170 175 180
 Leu Ser Gly Arg Leu Ser Val Asp Val Asn Ile Leu Glu Ser Ala
 185 190 195
 Gly Ile Ala Ser Leu Glu Val Leu Pro Leu His Asn Ser Arg Gln
 200 205 210
 Arg Gly Ser Gly Arg Gly Glu Asp Asp Ser Gly Pro Pro Pro Ser
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 Thr Val Ile Asn Gln Asn Glu Thr Phe Ala Asn Ile Ile Phe Lys

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<210> 62
 <211> 259
 <212> PRT
 <213> Homo Sapien

<400> 62
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 gaggtgaaca agcctggggg gtacacccgt gtcacctcct tcctggactg 1450
 gatccacgag cagatggaga gagacctaaa aacctgaaga ggaaggggac 1500

365	370	375
Gly Gly Ile Ile Ser Pro Ser Met Leu Cys Ala Gly Tyr Leu Thr		
380	385	390
Gly Gly Val Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Val		
395	400	405
Cys Gln Glu Arg Arg Leu Trp Lys Leu Val Gly Ala Thr Ser Phe		
410	415	420
Gly Ile Gly Cys Ala Glu Val Asn Lys Pro Gly Val Tyr Thr Arg		
425	430	435
Val Thr Ser Phe Leu Asp Trp Ile His Glu Gln Met Glu Arg Asp		
440	445	450
Leu Lys Thr		

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 <211> 1572
 <212> DNA
 <213> Homo Sapien

<400> 65
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 tgaaccacct gccagaagac atggagaacg ctctcaccgg gagccagagc 150
 tcccatgctt ctctgcgcaa tatccattcc atcaacccca cacaactcat 200
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<210> 68

<211> 215

<212> PRT

<213> Homo Sapien

<400> 68

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				20					25					30

Glu	Val	Thr	Val	Pro	Ala	Thr	Leu	Asn	Val	Leu	Asn	Gly	Ser	Asp
				35					40					45

Ala	Arg	Leu	Pro	Cys	Thr	Phe	Asn	Ser	Cys	Tyr	Thr	Val	Asn	His
				50					55					60

Lys	Gln	Phe	Ser	Leu	Asn	Trp	Thr	Tyr	Gln	Glu	Cys	Asn	Asn	Cys
				65					70					75

Ser	Glu	Glu	Met	Phe	Leu	Gln	Phe	Arg	Met	Lys	Ile	Ile	Asn	Leu
				80					85					90

Lys	Leu	Glu	Arg	Phe	Gln	Asp	Arg	Val	Glu	Phe	Ser	Gly	Asn	Pro
				95					100					105

Ser	Lys	Tyr	Asp	Val	Ser	Val	Met	Leu	Arg	Asn	Val	Gln	Pro	Glu
				110					115					120

Asp	Glu	Gly	Ile	Tyr	Asn	Cys	Tyr	Ile	Met	Asn	Pro	Pro	Asp	Arg
				125					130					135

His	Arg	Gly	His	Gly	Lys	Ile	His	Leu	Gln	Val	Leu	Met	Glu	Glu
				140					145					150

Pro	Pro	Glu	Arg	Asp	Ser	Thr	Val	Ala	Val	Ile	Val	Gly	Ala	Ser
				155					160					165

Val	Gly	Gly	Phe	Leu	Ala	Val	Val	Ile	Leu	Val	Leu	Met	Val	Val
				170					175					180

Lys	Cys	Val	Arg	Arg	Lys	Lys	Glu	Gln	Lys	Leu	Ser	Thr	Asp	Asp
				185					190					195

Leu	Lys	Thr	Glu	Glu	Glu	Gly	Lys	Thr	Asp	Gly	Glu	Gly	Asn	Pro
				200					205					210

Asp	Asp	Gly	Ala	Lys
				215

<210> 69

<211> 3038

<212> DNA

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 gcattatttc atcaagtcca atagaaatgg tattcaaaca attggcaaatt 1600
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<210> 70
 <211> 500
 <212> PRT
 <213> Homo Sapien

<400> 70
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 Phe Met Ala Arg Ala Ile Pro Ala Met Val Val Pro Asn Ala Thr
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 Leu Leu Glu Lys Leu Leu Glu Lys Tyr Met Asp Glu Asp Gly Glu
 35 40 45
 Trp Trp Ile Ala Lys Gln Arg Gly Lys Arg Ala Ile Thr Asp Asn
 50 55 60
 Asp Met Gln Ser Ile Leu Asp Leu His Asn Lys Leu Arg Ser Gln
 65 70 75
 Val Tyr Pro Thr Ala Ser Asn Met Glu Tyr Met Thr Trp Asp Val
 80 85 90
 Glu Leu Glu Arg Ser Ala Glu Ser Trp Ala Glu Ser Cys Leu Trp
 95 100 105
 Glu His Gly Pro Ala Ser Leu Leu Pro Ser Ile Gly Gln Asn Leu
 110 115 120
 Gly Ala His Trp Gly Arg Tyr Arg Pro Pro Thr Phe His Val Gln
 125 130 135
 Ser Trp Tyr Asp Glu Val Lys Asp Phe Ser Tyr Pro Tyr Glu His
 140 145 150
 Glu Cys Asn Pro Tyr Cys Pro Phe Arg Cys Ser Gly Pro Val Cys
 155 160 165
 Thr His Tyr Thr Gln Val Val Trp Ala Thr Ser Asn Arg Ile Gly
 170 175 180
 Cys Ala Ile Asn Leu Cys His Asn Met Asn Ile Trp Gly Gln Ile
 185 190 195
 Trp Pro Lys Ala Val Tyr Leu Val Cys Asn Tyr Ser Pro Lys Gly
 200 205 210
 Asn Trp Trp Gly His Ala Pro Tyr Lys His Gly Arg Pro Cys Ser
 215 220 225

Ala Cys Pro Pro Ser Phe Gly Gly Gly Cys Arg Glu Asn Leu Cys	230	235	240
Tyr Lys Glu Gly Ser Asp Arg Tyr Tyr Pro Pro Arg Glu Glu Glu	245	250	255
Thr Asn Glu Ile Glu Arg Gln Gln Ser Gln Val His Asp Thr His	260	265	270
Val Arg Thr Arg Ser Asp Asp Ser Ser Arg Asn Glu Val Ile Ser	275	280	285
Ala Gln Gln Met Ser Gln Ile Val Ser Cys Glu Val Arg Leu Arg	290	295	300
Asp Gln Cys Lys Gly Thr Thr Cys Asn Arg Tyr Glu Cys Pro Ala	305	310	315
Gly Cys Leu Asp Ser Lys Ala Lys Val Ile Gly Ser Val His Tyr	320	325	330
Glu Met Gln Ser Ser Ile Cys Arg Ala Ala Ile His Tyr Gly Ile	335	340	345
Ile Asp Asn Asp Gly Gly Trp Val Asp Ile Thr Arg Gln Gly Arg	350	355	360
Lys His Tyr Phe Ile Lys Ser Asn Arg Asn Gly Ile Gln Thr Ile	365	370	375
Gly Lys Tyr Gln Ser Ala Asn Ser Phe Thr Val Ser Lys Val Thr	380	385	390
Val Gln Ala Val Thr Cys Glu Thr Thr Val Glu Gln Leu Cys Pro	395	400	405
Phe His Lys Pro Ala Ser His Cys Pro Arg Val Tyr Cys Pro Arg	410	415	420
Asn Cys Met Gln Ala Asn Pro His Tyr Ala Arg Val Ile Gly Thr	425	430	435
Arg Val Tyr Ser Asp Leu Ser Ser Ile Cys Arg Ala Ala Val His	440	445	450
Ala Gly Val Val Arg Asn His Gly Gly Tyr Val Asp Val Met Pro	455	460	465
Val Asp Lys Arg Lys Thr Tyr Ile Ala Ser Phe Gln Asn Gly Ile	470	475	480
Phe Ser Glu Ser Leu Gln Asn Pro Pro Gly Gly Lys Ala Phe Arg	485	490	495
Val Phe Ala Val Val	500		

<210> 71

<211> 1879
<212> DNA
<213> Homo Sapien

<400> 71

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aaataattaa aaaaaaaact tcattctaa 1879

<210> 72
<211> 518
<212> PRT
<213> Homo Sapien

<400> 72
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Trp Leu Leu Arg Ala Ala Pro Glu Leu Ala Pro Ala Pro Phe Thr
20 25 30
Leu Pro Leu Arg Val Ala Ala Ala Thr Asn Arg Val Val Ala Pro
35 40 45
Thr Pro Gly Pro Gly Thr Pro Ala Glu Arg His Ala Asp Gly Leu
50 55 60
Ala Leu Ala Leu Glu Pro Ala Leu Ala Ser Pro Ala Gly Ala Ala
65 70 75
Asn Phe Leu Ala Met Val Asp Asn Leu Gln Gly Asp Ser Gly Arg
80 85 90
Gly Tyr Tyr Leu Glu Met Leu Ile Gly Thr Pro Pro Gln Lys Leu
95 100 105
Gln Ile Leu Val Asp Thr Gly Ser Ser Asn Phe Ala Val Ala Gly
110 115 120
Thr Pro His Ser Tyr Ile Asp Thr Tyr Phe Asp Thr Glu Arg Ser
125 130 135
Ser Thr Tyr Arg Ser Lys Gly Phe Asp Val Thr Val Lys Tyr Thr
140 145 150

Gln	Gly	Ser	Trp	Thr	Gly	Phe	Val	Gly	Glu	Asp	Leu	Val	Thr	Ile
				155					160					165
Pro	Lys	Gly	Phe	Asn	Thr	Ser	Phe	Leu	Val	Asn	Ile	Ala	Thr	Ile
				170					175					180
Phe	Glu	Ser	Glu	Asn	Phe	Phe	Leu	Pro	Gly	Ile	Lys	Trp	Asn	Gly
				185					190					195
Ile	Leu	Gly	Leu	Ala	Tyr	Ala	Thr	Leu	Ala	Lys	Pro	Ser	Ser	Ser
				200					205					210
Leu	Glu	Thr	Phe	Phe	Asp	Ser	Leu	Val	Thr	Gln	Ala	Asn	Ile	Pro
				215					220					225
Asn	Val	Phe	Ser	Met	Gln	Met	Cys	Gly	Ala	Gly	Leu	Pro	Val	Ala
				230					235					240
Gly	Ser	Gly	Thr	Asn	Gly	Gly	Ser	Leu	Val	Leu	Gly	Gly	Ile	Glu
				245					250					255
Pro	Ser	Leu	Tyr	Lys	Gly	Asp	Ile	Trp	Tyr	Thr	Pro	Ile	Lys	Glu
				260					265					270
Glu	Trp	Tyr	Tyr	Gln	Ile	Glu	Ile	Leu	Lys	Leu	Glu	Ile	Gly	Gly
				275					280					285
Gln	Ser	Leu	Asn	Leu	Asp	Cys	Arg	Glu	Tyr	Asn	Ala	Asp	Lys	Ala
				290					295					300
Ile	Val	Asp	Ser	Gly	Thr	Thr	Leu	Leu	Arg	Leu	Pro	Gln	Lys	Val
				305					310					315
Phe	Asp	Ala	Val	Val	Glu	Ala	Val	Ala	Arg	Ala	Ser	Leu	Ile	Pro
				320					325					330
Glu	Phe	Ser	Asp	Gly	Phe	Trp	Thr	Gly	Ser	Gln	Leu	Ala	Cys	Trp
				335					340					345
Thr	Asn	Ser	Glu	Thr	Pro	Trp	Ser	Tyr	Phe	Pro	Lys	Ile	Ser	Ile
				350					355					360
Tyr	Leu	Arg	Asp	Glu	Asn	Ser	Ser	Arg	Ser	Phe	Arg	Ile	Thr	Ile
				365					370					375
Leu	Pro	Gln	Leu	Tyr	Ile	Gln	Pro	Met	Met	Gly	Ala	Gly	Leu	Asn
				380					385					390
Tyr	Glu	Cys	Tyr	Arg	Phe	Gly	Ile	Ser	Pro	Ser	Thr	Asn	Ala	Leu
				395					400					405
Val	Ile	Gly	Ala	Thr	Val	Met	Glu	Gly	Phe	Tyr	Val	Ile	Phe	Asp
				410					415					420
Arg	Ala	Gln	Lys	Arg	Val	Gly	Phe	Ala	Ala	Ser	Pro	Cys	Ala	Glu
				425					430					435
Ile	Ala	Gly	Ala	Ala	Val	Ser	Glu	Ile	Ser	Gly	Pro	Phe	Ser	Thr

440	445	450
Glu Asp Val Ala Ser Asn Cys Val Pro Ala Gln Ser Leu Ser Glu		
455	460	465
Pro Ile Leu Trp Ile Val Ser Tyr Ala Leu Met Ser Val Cys Gly		
470	475	480
Ala Ile Leu Leu Val Leu Ile Val Leu Leu Leu Leu Pro Phe Arg		
485	490	495
Cys Gln Arg Arg Pro Arg Asp Pro Glu Val Val Asn Asp Glu Ser		
500	505	510
Ser Leu Val Arg His Arg Trp Lys		
515		

<210> 73
 <211> 2956
 <212> DNA
 <213> Homo Sapien

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Gln Ser Ala Ala His Phe Val Met Phe Phe Ala Pro Trp Cys Gly
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His Cys Gln Arg Leu Gln Pro Thr Trp Asn Asp Leu Gly Asp Lys
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Tyr Asn Ser Met Glu Asp Ala Lys Val Tyr Val Ala Lys Val Asp
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Cys Thr Ala His Ser Asp Val Cys Ser Ala Gln Gly Val Arg Gly
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<211> 515

<212> PRT

<213> Homo Sapien

<400> 76

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Ile	Cys	Thr	Pro	Ser	Arg	Ser	Gln	Phe	Ile	Thr	Gly	Lys	Tyr	Gln	
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Phe	Phe	Gly	Ser	Leu	Leu	Gly	Ser	Gly	Asp	Tyr	Tyr	Thr	His	Tyr	200	205	210
Lys	Cys	Asp	Ser	Pro	Gly	Met	Cys	Gly	Tyr	Asp	Leu	Tyr	Glu	Asn	215	220	225
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<211> 916

<212> PRT

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Ile	Arg	Tyr	Ser	Val	Pro	Glu	Glu	Leu	Glu	Lys	Gly	Ser	Arg	Val
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Gly	Asp	Ile	Ser	Arg	Asp	Leu	Gly	Leu	Glu	Pro	Arg	Glu	Leu	Ala
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Glu	Arg	Gly	Val	Arg	Ile	Ile	Pro	Arg	Gly	Arg	Thr	Gln	Leu	Phe
				65					70					75

Ala	Leu	Asn	Pro	Arg	Ser	Gly	Ser	Leu	Val	Thr	Ala	Gly	Arg	Ile	80	85	90
Asp	Arg	Glu	Glu	Leu	Cys	Met	Gly	Ala	Ile	Lys	Cys	Gln	Leu	Asn	95	100	105
Leu	Asp	Ile	Leu	Met	Glu	Asp	Lys	Val	Lys	Ile	Tyr	Gly	Val	Glu	110	115	120
Val	Glu	Val	Arg	Asp	Ile	Asn	Asp	Asn	Ala	Pro	Tyr	Phe	Arg	Glu	125	130	135
Ser	Glu	Leu	Glu	Ile	Lys	Ile	Ser	Glu	Asn	Ala	Ala	Thr	Glu	Met	140	145	150
Arg	Phe	Pro	Leu	Pro	His	Ala	Trp	Asp	Pro	Asp	Ile	Gly	Lys	Asn	155	160	165
Ser	Leu	Gln	Ser	Tyr	Glu	Leu	Ser	Pro	Asn	Thr	His	Phe	Ser	Leu	170	175	180
Ile	Val	Gln	Asn	Gly	Ala	Asp	Gly	Ser	Lys	Tyr	Pro	Glu	Leu	Val	185	190	195
Leu	Lys	Arg	Ala	Leu	Asp	Arg	Glu	Glu	Lys	Ala	Ala	His	His	Leu	200	205	210
Val	Leu	Thr	Ala	Ser	Asp	Gly	Gly	Asp	Pro	Val	Arg	Thr	Gly	Thr	215	220	225
Ala	Arg	Ile	Arg	Val	Met	Val	Leu	Asp	Ala	Asn	Asp	Asn	Ala	Pro	230	235	240
Ala	Phe	Ala	Gln	Pro	Glu	Tyr	Arg	Ala	Ser	Val	Pro	Glu	Asn	Leu	245	250	255
Ala	Leu	Gly	Thr	Gln	Leu	Leu	Val	Val	Asn	Ala	Thr	Asp	Pro	Asp	260	265	270
Glu	Gly	Val	Asn	Ala	Glu	Val	Arg	Tyr	Ser	Phe	Arg	Tyr	Val	Asp	275	280	285
Asp	Lys	Ala	Ala	Gln	Val	Phe	Lys	Leu	Asp	Cys	Asn	Ser	Gly	Thr	290	295	300
Ile	Ser	Thr	Ile	Gly	Glu	Leu	Asp	His	Glu	Glu	Ser	Gly	Phe	Tyr	305	310	315
Gln	Met	Glu	Val	Gln	Ala	Met	Asp	Asn	Ala	Gly	Tyr	Ser	Ala	Arg	320	325	330
Ala	Lys	Val	Leu	Ile	Thr	Val	Leu	Asp	Val	Asn	Asp	Asn	Ala	Pro	335	340	345
Glu	Val	Val	Leu	Thr	Ser	Leu	Ala	Ser	Ser	Val	Pro	Glu	Asn	Ser	350	355	360
Pro	Arg	Gly	Thr	Leu	Ile	Ala	Leu	Leu	Asn	Val	Asn	Asp	Gln	Asp			

Thr	Val	Ala	Val	Ala	Asp	Ser	Ile	Pro	Gln	Val	Leu	Ala	Asp	Leu	
				665					670					675	
Gly	Ser	Leu	Glu	Ser	Pro	Ala	Asn	Ser	Glu	Thr	Ser	Asp	Leu	Thr	
				680					685					690	
Leu	Tyr	Leu	Val	Val	Ala	Val	Ala	Ala	Val	Ser	Cys	Val	Phe	Leu	
				695					700					705	
Ala	Phe	Val	Ile	Leu	Leu	Leu	Ala	Leu	Arg	Leu	Arg	Arg	Trp	His	
				710					715					720	
Lys	Ser	Arg	Leu	Leu	Gln	Ala	Ser	Gly	Gly	Gly	Leu	Thr	Gly	Ala	
				725					730					735	
Pro	Ala	Ser	His	Phe	Val	Gly	Val	Asp	Gly	Val	Gln	Ala	Phe	Leu	
				740					745					750	
Gln	Thr	Tyr	Ser	His	Glu	Val	Ser	Leu	Thr	Thr	Asp	Ser	Arg	Lys	
				755					760					765	
Ser	His	Leu	Ile	Phe	Pro	Gln	Pro	Asn	Tyr	Ala	Asp	Met	Leu	Val	
				770					775					780	
Ser	Gln	Glu	Ser	Phe	Glu	Lys	Ser	Glu	Pro	Leu	Leu	Leu	Ser	Gly	
				785					790					795	
Asp	Ser	Val	Phe	Ser	Lys	Asp	Ser	His	Gly	Leu	Ile	Glu	Val	Ser	
				800					805					810	
Leu	Tyr	Gln	Ile	Phe	Phe	Leu	Phe	Phe	Phe	Asn	Cys	Ser	Val	Ser	
				815					820					825	
Gln	Ala	Gly	Val	Gln	Arg	Tyr	Asp	His	Ser	Ser	Leu	Arg	Pro	Gln	
				830					835					840	
Thr	Pro	Arg	Leu	Lys	Gln	Leu	Ser	His	Leu	Cys	Leu	Arg	Cys	Asn	
				845					850					855	
Arg	Asp	Tyr	Arg	Cys	Lys	Pro	Pro	Thr	Val	Cys	Leu	Ser	Ile	Tyr	
				860					865					870	
Leu	Ser	Ile	Tyr	Leu	Ser	Ile	Tyr	Leu	Ser	Ile	Tyr	Leu	Leu	Leu	
				875					880					885	
Ser	Cys	Thr	Asp	Gly	Ser	Leu	Thr	Pro	Val	Ile	Pro	Val	Leu	Trp	
				890					895					900	
Glu	Ala	Glu	Ala	Gly	Gly	Ser	Pro	Glu	Val	Gly	Ser	Leu	Arg	Pro	
				905					910					915	

Ala

<210> 79
 <211> 2049
 <212> DNA
 <213> Homo Sapien

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atggaagtca caccctcttg aaaaaagaac tcttaactct ccagcacaca 1550
tacacatgga ctcttgccag cttgagccta gaagccatgt ctctcaaagt 1600
ccctgagaaa gggaacaagc agataccagg tcaagggcac caggttcatt 1650
tcagccctta catggacagc tagagggttc atatctgtgg gtccttccag 1700
gcaagaagag ggagatgaga gcaagagacg actgaagtcc caccctagaa 1750
cccagcctgc cccagcctgc ccctgggaag aggaaactta accactcccc 1800
agaccacact aggcaggcat ataggctgcc atcctggacc agggatcccg 1850
gctgtgcctt tgcagtcatg cccgagtcac ctttcacagc gctgttcctc 1900
catgaaactg aaaaacacac acacacacac acacacacac acacacacac 1950
acacacacac ggacacacac acacacctgc gagagagagg gaggaagggg 2000
ctgtgccttt gcagtcatgc ccgagtcacc tttcacagca ctgttcctc 2049

<210> 80
<211> 351
<212> PRT
<213> Homo Sapien

<400> 80
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20 25 30
Leu Ser Ser Val Gly Ser Ile Ser Glu Glu Glu Thr Cys Glu Lys
35 40 45
Leu Lys Gly Leu Ile Gln Arg Gln Val Gln Met Cys Lys Arg Asn
50 55 60
Leu Glu Val Met Asp Ser Val Arg Arg Gly Ala Gln Leu Ala Ile
65 70 75
Glu Glu Cys Gln Tyr Gln Phe Arg Asn Arg Arg Trp Asn Cys Ser
80 85 90
Thr Leu Asp Ser Leu Pro Val Phe Gly Lys Val Val Thr Gln Gly
95 100 105
Thr Arg Glu Ala Ala Phe Val Tyr Ala Ile Ser Ser Ala Gly Val
110 115 120
Ala Phe Ala Val Thr Arg Ala Cys Ser Ser Gly Glu Leu Glu Lys
125 130 135
Cys Gly Cys Asp Arg Thr Val His Gly Val Ser Pro Gln Gly Phe

140	145	150
Gln Trp Ser Gly Cys Ser Asp Asn Ile	Ala Tyr Gly Val Ala Phe	
155	160	165
Ser Gln Ser Phe Val Asp Val Arg Glu	Arg Ser Lys Gly Ala Ser	
170	175	180
Ser Ser Arg Ala Leu Met Asn Leu His	Asn Asn Glu Ala Gly Arg	
185	190	195
Lys Ala Ile Leu Thr His Met Arg Val	Glu Cys Lys Cys His Gly	
200	205	210
Val Ser Gly Ser Cys Glu Val Lys Thr	Cys Trp Arg Ala Val Pro	
215	220	225
Pro Phe Arg Gln Val Gly His Ala Leu	Lys Glu Lys Phe Asp Gly	
230	235	240
Ala Thr Glu Val Glu Pro Arg Arg Val	Gly Ser Ser Arg Ala Leu	
245	250	255
Val Pro Arg Asn Ala Gln Phe Lys Pro	His Thr Asp Glu Asp Leu	
260	265	270
Val Tyr Leu Glu Pro Ser Pro Asp Phe	Cys Glu Gln Asp Met Arg	
275	280	285
Ser Gly Val Leu Gly Thr Arg Gly Arg	Thr Cys Asn Lys Thr Ser	
290	295	300
Lys Ala Ile Asp Gly Cys Glu Leu Leu	Cys Cys Gly Arg Gly Phe	
305	310	315
His Thr Ala Gln Val Glu Leu Ala Glu	Arg Cys Ser Cys Lys Phe	
320	325	330
His Trp Cys Cys Phe Val Lys Cys Arg	Gln Cys Gln Arg Leu Val	
335	340	345
Glu Leu His Thr Cys Arg		
350		

<210> 81

<211> 3150

<212> DNA

<213> Homo Sapien

<400> 81

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gtgagtgcaa tctacggatc agtctctgat ggtgggtcgt taacctcagt 100

ggggactcca agatttccat gaagaaaatc agttgtcttc attcaagaat 150

tgggggtctgg ctcaagaattc ctgcagctgg tgaaaatctg ttttctagaa 200

gtgttgcat tgaatatgtc tgtttctata aataaatttt ttaagaataa 3150

<210> 82

<211> 480

<212> PRT

<213> Homo Sapien

<400> 82

Met	Leu	Phe	Arg	Asn	Arg	Phe	Leu	Leu	Leu	Leu	Ala	Leu	Ala	Ala	
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Leu	Leu	Ala	Phe	Val	Ser	Leu	Ser	Leu	Gln	Phe	Phe	His	Leu	Ile	
				20					25					30	
Pro	Val	Ser	Thr	Pro	Lys	Asn	Gly	Met	Ser	Ser	Lys	Ser	Arg	Lys	
				35					40					45	
Arg	Ile	Met	Pro	Asp	Pro	Val	Thr	Glu	Pro	Pro	Val	Thr	Asp	Pro	
				50					55					60	
Val	Tyr	Glu	Ala	Leu	Leu	Tyr	Cys	Asn	Ile	Pro	Ser	Val	Ala	Glu	
				65					70					75	
Arg	Ser	Met	Glu	Gly	His	Ala	Pro	His	His	Phe	Lys	Leu	Val	Ser	
				80					85					90	
Val	His	Val	Phe	Ile	Arg	His	Gly	Asp	Arg	Tyr	Pro	Leu	Tyr	Val	
				95					100					105	
Ile	Pro	Lys	Thr	Lys	Arg	Pro	Glu	Ile	Asp	Cys	Thr	Leu	Val	Ala	
				110					115					120	
Asn	Arg	Lys	Pro	Tyr	His	Pro	Lys	Leu	Glu	Ala	Phe	Ile	Ser	His	
				125					130					135	
Met	Ser	Lys	Gly	Ser	Gly	Ala	Ser	Phe	Glu	Ser	Pro	Leu	Asn	Ser	
				140					145					150	
Leu	Pro	Leu	Tyr	Pro	Asn	His	Pro	Leu	Cys	Glu	Met	Gly	Glu	Leu	
				155					160					165	
Thr	Gln	Thr	Gly	Val	Val	Gln	His	Leu	Gln	Asn	Gly	Gln	Leu	Leu	
				170					175					180	
Arg	Asp	Ile	Tyr	Leu	Lys	Lys	His	Lys	Leu	Leu	Pro	Asn	Asp	Trp	
				185					190					195	
Ser	Ala	Asp	Gln	Leu	Tyr	Leu	Glu	Thr	Thr	Gly	Lys	Ser	Arg	Thr	
				200					205					210	
Leu	Gln	Ser	Gly	Leu	Ala	Leu	Leu	Tyr	Gly	Phe	Leu	Pro	Asp	Phe	
				215					220					225	
Asp	Trp	Lys	Lys	Ile	Tyr	Phe	Arg	His	Gln	Pro	Ser	Ala	Leu	Phe	
				230					235					240	
Cys	Ser	Gly	Ser	Cys	Tyr	Cys	Pro	Val	Arg	Asn	Gln	Tyr	Leu	Glu	
				245					250					255	

Lys Glu Gln Arg Arg Gln Tyr Leu Leu Arg Leu Lys Asn Ser Gln
260 265 270

Leu Glu Lys Thr Tyr Gly Glu Met Ala Lys Ile Val Asp Val Pro
275 280 285

Thr Lys Gln Leu Arg Ala Ala Asn Pro Ile Asp Ser Met Leu Cys
290 295 300

His Phe Cys His Asn Val Ser Phe Pro Cys Thr Arg Asn Gly Cys
305 310 315

Val Asp Met Glu His Phe Lys Val Ile Lys Thr His Gln Ile Glu
320 325 330

Asp Glu Arg Glu Arg Arg Glu Lys Lys Leu Tyr Phe Gly Tyr Ser
335 340 345

Leu Leu Gly Ala His Pro Ile Leu Asn Gln Thr Ile Gly Arg Met
350 355 360

Gln Arg Ala Thr Glu Gly Arg Lys Glu Glu Leu Phe Ala Leu Tyr
365 370 375

Ser Ala His Asp Val Thr Leu Ser Pro Val Leu Ser Ala Leu Gly
380 385 390

Leu Ser Glu Ala Arg Phe Pro Arg Phe Ala Ala Arg Leu Ile Phe
395 400 405

Glu Leu Trp Gln Asp Arg Glu Lys Pro Ser Glu His Ser Val Arg
410 415 420

Ile Leu Tyr Asn Gly Val Asp Val Thr Phe His Thr Ser Phe Cys
425 430 435

Gln Asp His His Lys Arg Ser Pro Lys Pro Met Cys Pro Leu Glu
440 445 450

Asn Leu Val Arg Phe Val Lys Arg Asp Met Phe Val Ala Leu Gly
455 460 465

Gly Ser Gly Thr Asn Tyr Tyr Asp Ala Cys His Arg Glu Gly Phe
470 475 480

<210> 83

<211> 3127

<212> DNA

<213> Homo Sapien

<400> 83

tctcgcatgat agtaaataat ctcggaagagg cgagaaagaa gctgtctcca 50

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tggggctgtg ctccatggcg agctggatac catgtttgtg tggaagtgcc 150

ccgtgtttgc tatgccgatg ctgtcctagt ggaaacaact ccactgtaac 200

tagattgatc tatgcacttt tcttgcttgt tggagtatgt gtagcttgtg 250
 taatgttgat accaggaatg gaagaacaac tgaataagat tcctggattt 300
 tgtgagaatg agaaagggtg tgtcccttgt aacattttgg ttggctataa 350
 agctgtatat cgtttgtgct ttggtttggc tatgttctat cttcttctct 400
 ctttactaat gatcaaagtg aagagtagca gtgacctag agctgcagtg 450
 cacaatggat tttggttctt taaatttgct gcagcaattg caattattat 500
 tggggcattc ttcattccag aaggaacttt tacaactgtg tggttttatg 550
 taggcacggc aggtgccttt tgtttcatcc tcatacaact agtcttactt 600
 attgattttg cacattcatg gaatgaatcg tggggtgaaa aaatggaaga 650
 agggaaactcg agatgttggt atgcagcctt gttatcagct acagctctga 700
 attatctgct gtctttagtt gctatcgctc tgttctttgt ctactacact 750
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 cctctgcggt ggtgcttctg taatgtctat actgccaaaa atccaagaat 850
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 cccaagtcta ctaagcataa ttggctacaa tacaacaagc actgtcccaa 1000
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 attctctttt tgttgtgtgt attttattcc agcatccgta cttcaaacaa 1100
 tagtcagggt aataaactga ctctaacaag tgatgaatct acattaatag 1150
 aagatgggtg agctagaagt gatggatcac tggaggatgg ggacgatggt 1200
 caccgagctg tagataatga aagggatggt gtcacttaca gttattcctt 1250
 ctttcacttc atgcttttcc tggcttcact ttatatcatg atgaccctta 1300
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 agtattccca acttttgtaa agttgtgtat gtttttgctt cccatgtaac 1550
 ttctccagtg ttctggcatg aattagattt tactgcttgt cattttgtta 1600
 ttttcttacc aagtgcattg atatgtgaag tagaatgaat tgacagaggaa 1650

Gln Pro Arg Ser Gly Leu Leu Gln Ser Ser Val Ile Thr Val Tyr
260 265 270

Thr Met Tyr Leu Thr Trp Ser Ala Met Thr Asn Glu Pro Glu Thr
275 280 285

Asn Cys Asn Pro Ser Leu Leu Ser Ile Ile Gly Tyr Asn Thr Thr
290 295 300

Ser Thr Val Pro Lys Glu Gly Gln Ser Val Gln Trp Trp His Ala
305 310 315

Gln Gly Ile Ile Gly Leu Ile Leu Phe Leu Leu Cys Val Phe Tyr
320 325 330

Ser Ser Ile Arg Thr Ser Asn Asn Ser Gln Val Asn Lys Leu Thr
335 340 345

Leu Thr Ser Asp Glu Ser Thr Leu Ile Glu Asp Gly Gly Ala Arg
350 355 360

Ser Asp Gly Ser Leu Glu Asp Gly Asp Asp Val His Arg Ala Val
365 370 375

Asp Asn Glu Arg Asp Gly Val Thr Tyr Ser Tyr Ser Phe Phe His
380 385 390

Phe Met Leu Phe Leu Ala Ser Leu Tyr Ile Met Met Thr Leu Thr
395 400 405

Asn Trp Ser Arg Tyr Glu Pro Ser Arg Glu Met Lys Ser Gln Trp
410 415 420

Thr Ala Val Trp Val Lys Ile Ser Ser Ser Trp Ile Gly Ile Val
425 430 435

Leu Tyr Val Trp Thr Leu Val Ala Pro Leu Val Leu Thr Asn Arg
440 445 450

Asp Phe Asp

<210> 85
<211> 971
<212> DNA
<213> Homo Sapien

<400> 85
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aaggagttag gagctgctgg gcagagaggg actgtccggc tcccagatgc 100
tgggcctcct ggggagcaca gccctcgtgg gatggatcac aggtgctgct 150
gtggcggtcc tgctgctgct gctgctgctg gccacctgcc ttttccacgg 200
acggcaggac tgtgacgtgg agaggaaccg tacagctgca gggggaaacc 250

gagtccgccc ggcccagcct tggcccttcc ggcggcgggg ccacctggga 300
atctttcacc atcacggtca tcttggtcac gtatctcatg tgccgaatgt 350
gggcctccac caccaccacc acccccgcga caccctcac cacctccacc 400
accaccacca cccccaccgc caccatcccc gccacgctcg ctgaggtgc 450
tgtcgccggt gcctgtggac agcagctgcc cctgccctcc catctgttcc 500
caggacaagt ggaccccatg tttccatgtg gaaggatgca tctctgggg 550
gaacgagggg aacaatagac tggggcttgc tccagctgca tttgcatggc 600
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gtgctgaagg gtttggggag tggagagcaa ggggtgctctt tcggggctgg 700
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gtgtcttggc agagccagca cacaagtgga tgtgaagtgc ccgtcttgac 800
ctcctcatca ggctgctgca ggctcttggc gggcagggca ctgggagagg 850
ccctgagaat gtccttttgg tttggagaag gcagtgtgag gctgcacagt 900
caattcatcg gtgccttagt ccaagaaaat aaaaaccact aagaagcttt 950
aaaaaaaaa aaaaaaaaaa a 971

<210> 86
<211> 115
<212> PRT
<213> Homo Sapien

<400> 86
Met Leu Gly Leu Leu Gly Ser Thr Ala Leu Val Gly Trp Ile Thr
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Gly Ala Ala Val Ala Val Leu Leu Leu Leu Leu Leu Leu Ala Thr
20 25 30
Cys Leu Phe His Gly Arg Gln Asp Cys Asp Val Glu Arg Asn Arg
35 40 45
Thr Ala Ala Gly Gly Asn Arg Val Arg Arg Ala Gln Pro Trp Pro
50 55 60
Phe Arg Arg Arg Gly His Leu Gly Ile Phe His His His Arg His
65 70 75
Pro Gly His Val Ser His Val Pro Asn Val Gly Leu His His His
80 85 90
His His Pro Arg His Thr Pro His His Leu His His His His His
95 100 105
Pro His Arg His His Pro Arg His Ala Arg

<210> 87
 <211> 3305
 <212> DNA
 <213> Homo Sapien

<400> 87
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 gcacgcacac acacgggggg aaactttttt aaaaatgaaa ggctagaaga 150
 gctcagcggc ggcgcgggcg ctgcgcgagg gctccggagc tgactcgccg 200
 aggcaggaaa tccctccggt cgcgcgccc ggccccggct cggcgccccg 250
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 atccagaagt gctgaatatt cgactacaac gggaaagcaa agaactgac 550
 ataaatctgg aaagaaatga aggtctcatt gccagcagtt tcacggaaac 600
 ccactatctg caagacggta ctgatgtctc cctcgctcga aattacacgg 650
 gtcactgtta ctacatgga catgtacggg gatattctga ttcagcagtc 700
 agtctcagca cgtgttctgg tctcagggga cttattgtgt ttgaaaatga 750
 aagctatgtc ttagaaccaa tgaaaagtgc aaccaacaga tacaaactct 800
 tcccagcgaa gaagctgaaa agcgtccggg gatcatgtgg atcacatcac 850
 aacacaccaa acctcgctgc aaagaatgtg tttccaccac cctctcagac 900
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 ctggaaaaag ttaagcagcg attaataagag attgctaata acgttgacaa 1050
 gttttacaga ccactgaaca ttcggatcgt gttggtaggc gtggaagtgt 1100
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gcatggcccc	aatcatgagc	atgtgcacgg	cagaccagtc	tgggggaatt	1300
gtcatggacc	attcagacaa	tccccttgg	gcagccgtga	ccctggcaca	1350
tgagctgggc	cacaatttcg	ggatgaatca	tgacacactg	gacaggggct	1400
gtagctgtca	aatggcggtt	gagaaaggag	gctgcatcat	gaacgcttcc	1450
accgggtacc	catttcccat	ggtgttcagc	agttgcagca	ggaaggactt	1500
ggagaccagc	ctggagaaa	gaatgggggt	gtgcctgttt	aacctgccgg	1550
aagtcaggga	gtctttcggg	ggccagaagt	gtgggaacag	atttgtggaa	1600
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gactccagca	actcctgtga	cctcccagag	ttctgcacag	gggccagccc	1800
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tggacggcta	ctgctacaat	ggcatctgcc	agactcacga	gcagcagtgt	1900
gtcacgctct	ggggaccagg	tgctaaacct	gcccctggga	tctgctttga	1950
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cagtgtcaag	gaggtgccag	ccggccagtc	attggtacca	atgccgtttc	2100
catagaaaca	aacatccctc	tgacagcaagg	aggccggatt	ctgtgccggg	2150
ggaccacagt	gtacttgggc	gatgacatgc	cggaccaggg	gcttgtgctt	2200
gcaggcacia	agtgtgcaga	tggaaaaatc	tgcttgaatc	gtcaatgtca	2250
aaatattagt	gtctttgggg	ttcacgagtg	tgcaatgcag	tgccacggca	2300
gaggggtgtg	caacaacagg	aagaactgcc	actgcgaggc	ccactgggca	2350
cctcccttct	gtgacaagtt	tggctttgga	ggaagcacag	acagcggccc	2400
catccggcaa	gcagaagcaa	ggcaggaagc	tgacagatcc	aacagggagc	2450
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Ser Gly Leu Arg Gly Leu Ile Val Phe Glu Asn Glu Ser Tyr Val	140	145	150
Leu Glu Pro Met Lys Ser Ala Thr Asn Arg Tyr Lys Leu Phe Pro	155	160	165
Ala Lys Lys Leu Lys Ser Val Arg Gly Ser Cys Gly Ser His His	170	175	180
Asn Thr Pro Asn Leu Ala Ala Lys Asn Val Phe Pro Pro Pro Ser	185	190	195
Gln Thr Trp Ala Arg Arg His Lys Arg Glu Thr Leu Lys Ala Thr	200	205	210
Lys Tyr Val Glu Leu Val Ile Val Ala Asp Asn Arg Glu Phe Gln	215	220	225
Arg Gln Gly Lys Asp Leu Glu Lys Val Lys Gln Arg Leu Ile Glu	230	235	240
Ile Ala Asn His Val Asp Lys Phe Tyr Arg Pro Leu Asn Ile Arg	245	250	255
Ile Val Leu Val Gly Val Glu Val Trp Asn Asp Met Asp Lys Cys	260	265	270
Ser Val Ser Gln Asp Pro Phe Thr Ser Leu His Glu Phe Leu Asp	275	280	285
Trp Arg Lys Met Lys Leu Leu Pro Arg Lys Ser His Asp Asn Ala	290	295	300
Gln Leu Val Ser Gly Val Tyr Phe Gln Gly Thr Thr Ile Gly Met	305	310	315
Ala Pro Ile Met Ser Met Cys Thr Ala Asp Gln Ser Gly Gly Ile	320	325	330
Val Met Asp His Ser Asp Asn Pro Leu Gly Ala Ala Val Thr Leu	335	340	345
Ala His Glu Leu Gly His Asn Phe Gly Met Asn His Asp Thr Leu	350	355	360
Asp Arg Gly Cys Ser Cys Gln Met Ala Val Glu Lys Gly Gly Cys	365	370	375
Ile Met Asn Ala Ser Thr Gly Tyr Pro Phe Pro Met Val Phe Ser	380	385	390
Ser Cys Ser Arg Lys Asp Leu Glu Thr Ser Leu Glu Lys Gly Met	395	400	405
Gly Val Cys Leu Phe Asn Leu Pro Glu Val Arg Glu Ser Phe Gly	410	415	420
Gly Gln Lys Cys Gly Asn Arg Phe Val Glu Glu Gly Glu Glu Cys			

				425					430					435
Asp	Cys	Gly	Glu	Pro 440	Glu	Glu	Cys	Met	Asn 445	Arg	Cys	Cys	Asn	Ala 450
Thr	Thr	Cys	Thr	Leu 455	Lys	Pro	Asp	Ala	Val 460	Cys	Ala	His	Gly	Leu 465
Cys	Cys	Glu	Asp	Cys 470	Gln	Leu	Lys	Pro	Ala 475	Gly	Thr	Ala	Cys	Arg 480
Asp	Ser	Ser	Asn	Ser 485	Cys	Asp	Leu	Pro	Glu 490	Phe	Cys	Thr	Gly	Ala 495
Ser	Pro	His	Cys	Pro 500	Ala	Asn	Val	Tyr	Leu 505	His	Asp	Gly	His	Ser 510
Cys	Gln	Asp	Val	Asp 515	Gly	Tyr	Cys	Tyr	Asn 520	Gly	Ile	Cys	Gln	Thr 525
His	Glu	Gln	Gln	Cys 530	Val	Thr	Leu	Trp	Gly 535	Pro	Gly	Ala	Lys	Pro 540
Ala	Pro	Gly	Ile	Cys 545	Phe	Glu	Arg	Val	Asn 550	Ser	Ala	Gly	Asp	Pro 555
Tyr	Gly	Asn	Cys	Gly 560	Lys	Val	Ser	Lys	Ser 565	Ser	Phe	Ala	Lys	Cys 570
Glu	Met	Arg	Asp	Ala 575	Lys	Cys	Gly	Lys	Ile 580	Gln	Cys	Gln	Gly	Gly 585
Ala	Ser	Arg	Pro	Val 590	Ile	Gly	Thr	Asn	Ala 595	Val	Ser	Ile	Glu	Thr 600
Asn	Ile	Pro	Leu	Gln 605	Gln	Gly	Gly	Arg	Ile 610	Leu	Cys	Arg	Gly	Thr 615
His	Val	Tyr	Leu	Gly 620	Asp	Asp	Met	Pro	Asp 625	Pro	Gly	Leu	Val	Leu 630
Ala	Gly	Thr	Lys	Cys 635	Ala	Asp	Gly	Lys	Ile 640	Cys	Leu	Asn	Arg	Gln 645
Cys	Gln	Asn	Ile	Ser 650	Val	Phe	Gly	Val	His 655	Glu	Cys	Ala	Met	Gln 660
Cys	His	Gly	Arg	Gly 665	Val	Cys	Asn	Asn	Arg 670	Lys	Asn	Cys	His	Cys 675
Glu	Ala	His	Trp	Ala 680	Pro	Pro	Phe	Cys	Asp 685	Lys	Phe	Gly	Phe	Gly 690
Gly	Ser	Thr	Asp	Ser 695	Gly	Pro	Ile	Arg	Gln 700	Ala	Glu	Ala	Arg	Gln 705
Glu	Ala	Ala	Glu	Ser 710	Asn	Arg	Glu	Arg	Gly 715	Gln	Gly	Gln	Glu	Pro 720

Val	Gly	Ser	Gln	Glu	His	Ala	Ser	Thr	Ala	Ser	Leu	Thr	Leu	Ile
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 <211> 1316
 <212> DNA
 <213> Homo Sapien

<400> 89
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 ccaactgcacg acgggggtgg actgacctga aaaaaatgtc tggatttcta 150
 gagggcttga gatgctcaga atgcattgac tggggggaaa agcgcaatac 200
 tattgcttcc attgctgctg gtgtactatt ttttacaggc tgggtggatta 250
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 tccacatcca ccactg 1316

<210> 90
 <211> 157
 <212> PRT
 <213> Homo Sapien

<400> 90
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 Leu Phe Phe Thr Gly Trp Trp Ile Ile Ile Asp Ala Ala Val Ile
 35 40 45
 Tyr Pro Thr Met Lys Asp Phe Asn His Ser Tyr His Ala Cys Gly
 50 55 60
 Val Ile Ala Thr Ile Ala Phe Leu Met Ile Asn Ala Val Ser Asn
 65 70 75
 Gly Gln Val Arg Gly Asp Ser Tyr Ser Glu Gly Cys Leu Gly Gln
 80 85 90
 Thr Gly Ala Arg Ile Trp Leu Phe Val Gly Phe Met Leu Ala Phe
 95 100 105
 Gly Ser Leu Ile Ala Ser Met Trp Ile Leu Phe Gly Gly Tyr Val
 110 115 120
 Ala Lys Glu Lys Asp Ile Val Tyr Pro Gly Ile Ala Val Phe Phe
 125 130 135
 Gln Asn Ala Phe Ile Phe Phe Gly Gly Leu Val Phe Lys Phe Gly
 140 145 150
 Arg Thr Glu Asp Leu Trp Gln
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<210> 91
 <211> 3004
 <212> DNA
 <213> Homo Sapien

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 ccgaatcctt tctccgaaga tgtcaaacgg cccccagcgc ccctggtaac 150
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<210> 92
 <211> 610
 <212> PRT
 <213> Homo Sapien

<400> 92

Met	Trp	Leu	Pro	Leu	Val	Leu	Leu	Leu	Ala	Val	Leu	Leu	Leu	Ala	1	5	10	15
Val	Leu	Cys	Lys	Val	Tyr	Leu	Gly	Leu	Phe	Ser	Gly	Ser	Ser	Pro	20	25	30	
Asn	Pro	Phe	Ser	Glu	Asp	Val	Lys	Arg	Pro	Pro	Ala	Pro	Leu	Val	35	40	45	
Thr	Asp	Lys	Glu	Ala	Arg	Lys	Lys	Val	Leu	Lys	Gln	Ala	Phe	Ser	50	55	60	
Ala	Asn	Gln	Val	Pro	Glu	Lys	Leu	Asp	Val	Val	Val	Ile	Gly	Ser	65	70	75	
Gly	Phe	Gly	Gly	Leu	Ala	Ala	Ala	Ala	Ile	Leu	Ala	Lys	Ala	Gly	80	85	90	
Lys	Arg	Val	Leu	Val	Leu	Glu	Gln	His	Thr	Lys	Ala	Gly	Gly	Cys	95	100	105	
Cys	His	Thr	Phe	Gly	Lys	Asn	Gly	Leu	Glu	Phe	Asp	Thr	Gly	Ile	110	115	120	
His	Tyr	Ile	Gly	Arg	Met	Glu	Glu	Gly	Ser	Ile	Gly	Arg	Phe	Ile	125	130	135	
Leu	Asp	Gln	Ile	Thr	Glu	Gly	Gln	Leu	Asp	Trp	Ala	Pro	Leu	Ser	140	145	150	
Ser	Pro	Phe	Asp	Ile	Met	Val	Leu	Glu	Gly	Pro	Asn	Gly	Arg	Lys	155	160	165	
Glu	Tyr	Pro	Met	Tyr	Ser	Gly	Glu	Lys	Ala	Tyr	Ile	Gln	Gly	Leu	170	175	180	
Lys	Glu	Lys	Phe	Pro	Gln	Glu	Glu	Ala	Ile	Ile	Asp	Lys	Tyr	Ile	185	190	195	
Lys	Leu	Val	Lys	Val	Val	Ser	Ser	Gly	Ala	Pro	His	Ala	Ile	Leu	200	205	210	
Leu	Lys	Phe	Leu	Pro	Leu	Pro	Val	Val	Gln	Leu	Leu	Asp	Arg	Cys	215	220	225	
Gly	Leu	Leu	Thr	Arg	Phe	Ser	Pro	Phe	Leu	Gln	Ala	Ser	Thr	Gln	230	235	240	
Ser	Leu	Ala	Glu	Val	Leu	Gln	Gln	Leu	Gly	Ala	Ser	Ser	Glu	Leu	245	250	255	
Gln	Ala	Val	Leu	Ser	Tyr	Ile	Phe	Pro	Thr	Tyr	Gly	Val	Thr	Pro	260	265	270	
Asn	His	Ser	Ala	Phe	Ser	Met	His	Ala	Leu	Leu	Val	Asn	His	Tyr	275	280	285	

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<210> 94

<211> 348

<212> PRT

<213> Homo Sapien

<400> 94

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Arg	Cys	Leu	Ser	Ala	Arg	Asp	Gly	Ser	Arg	Met	Leu	Leu	Leu	Leu	
				20					25					30	
Leu	Leu	Leu	Gly	Ser	Gly	Gln	Gly	Pro	Gln	Gln	Val	Gly	Ala	Gly	
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Gln	Thr	Phe	Glu	Tyr	Leu	Lys	Arg	Glu	His	Ser	Leu	Ser	Lys	Pro	
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Tyr	Gln	Gly	Val	Gly	Thr	Gly	Ser	Ser	Ser	Leu	Trp	Asn	Leu	Met	
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Gly	Asn	Ala	Met	Val	Met	Thr	Gln	Tyr	Ile	Arg	Leu	Thr	Pro	Asp	
				80					85					90	
Met	Gln	Ser	Lys	Gln	Gly	Ala	Leu	Trp	Asn	Arg	Val	Pro	Cys	Phe	
				95					100					105	
Leu	Arg	Asp	Trp	Glu	Leu	Gln	Val	His	Phe	Lys	Ile	His	Gly	Gln	
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Gly	Lys	Lys	Asn	Leu	His	Gly	Asp	Gly	Leu	Ala	Ile	Trp	Tyr	Thr	
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Lys	Asp	Arg	Met	Gln	Pro	Gly	Pro	Val	Phe	Gly	Asn	Met	Asp	Lys	
				140					145					150	
Phe	Val	Gly	Leu	Gly	Val	Phe	Val	Asp	Thr	Tyr	Pro	Asn	Glu	Glu	
				155					160					165	
Lys	Gln	Gln	Glu	Arg	Val	Phe	Pro	Tyr	Ile	Ser	Ala	Met	Val	Asn	
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Asn	Gly	Ser	Leu	Ser	Tyr	Asp	His	Glu	Arg	Asp	Gly	Arg	Pro	Thr	
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Glu	Leu	Gly	Gly	Cys	Thr	Ala	Ile	Val	Arg	Asn	Leu	His	Tyr	Asp	
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Thr	Phe	Leu	Val	Ile	Arg	Tyr	Val	Lys	Arg	His	Leu	Thr	Ile	Met	
				215					220					225	
Met	Asp	Ile	Asp	Gly	Lys	His	Glu	Trp	Arg	Asp	Cys	Ile	Glu	Val	
				230					235					240	
Pro	Gly	Val	Arg	Leu	Pro	Arg	Gly	Tyr	Tyr	Phe	Gly	Thr	Ser	Ser	
				245					250					255	
Ile	Thr	Gly	Asp	Leu	Ser	Asp	Asn	His	Asp	Val	Ile	Ser	Leu	Lys	
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Leu Phe Glu Leu Thr Val Glu Arg Thr Pro Glu Glu Glu Lys Leu
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 His Arg Asp Val Phe Leu Pro Ser Val Asp Asn Met Lys Leu Pro
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 Glu Met Thr Ala Pro Leu Pro Pro Leu Ser Gly Leu Ala Leu Phe
 305 310 315
 Leu Ile Val Phe Phe Ser Leu Val Phe Ser Val Phe Ala Ile Val
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Arg Phe Tyr

<210> 95

<211> 2579

<212> DNA

<213> Homo Sapien

<400> 95

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gagaagttgc aaaccgagtt tccaagggtca gccaacccc aggggtgtatc 1300
cgtgccctca tgaagatgct gtactgccca tactgtcggg ggcttcccac 1350
tgtgaggccc tgcaacaact actgtctcaa cgtcatgaag ggctgcttgg 1400
caaatcaggc tgacctcgac acagagtgga atctgtttat agatgcaatg 1450
ctcttggtgg cagagcgact ggaggggcca ttcaacattg agtcgggtcat 1500
ggacccgata gatgtcaaga tttctgaagc cattatgaac atgcaagaaa 1550
acagcatgca ggtgtctgca aaggctcttc agggatgtgg tcagcccaaa 1600
cctgctccag ccctcagatc tgcccgtca gctcctgaaa attttaatac 1650
acgtttcagg ccctacaatc ctgaggaaag accaacaact gctgcaggca 1700
caagcttgga cgggctggtc acagacataa aagagaaatt gaagctctct 1750
aaaaaggtct ggtcagcatt accctacact atctgcaagg acgagagcgt 1800
gacagcgggc acgtccaacg aggaggaatg ctggaacggg cacagcaaag 1850
ccagatactt gcctgagatc atgaatgatg ggctcaccaa ccagatcaac 1900
aatcccaggg tggatgtgga catcactcgg cctgacactt tcatcagaca 1950
gcagattatg gctctccgtg tgatgaccaa caaactaaaa aacgcctaca 2000
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tgtcaccaca gaggcccccg cagtggatcc cgaccggaga gaggtggact 2150
cttctgcagc ccagcgtggc cactccctgc tctcctggtc tctcacctgc 2200
attgtcctgg cactgcagag actgtgcaga taatcttggg tttttgggtca 2250
gatgaaactg cattttagct atctgaatgg ccaactcact tcttttctta 2300

cactcttgga caatggacca tgccacaaaa acttaccgtt ttctatgaga 2350
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<210> 96
 <211> 555
 <212> PRT
 <213> Homo Sapien

<400> 96
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 20 25 30
 Gly Glu Val Arg Gln Ala Tyr Gly Ala Lys Gly Phe Ser Leu Ala
 35 40 45
 Asp Ile Pro Tyr Gln Glu Ile Ala Gly Glu His Leu Arg Ile Cys
 50 55 60
 Pro Gln Glu Tyr Thr Cys Cys Thr Thr Glu Met Glu Asp Lys Leu
 65 70 75
 Ser Gln Gln Ser Lys Leu Glu Phe Glu Asn Leu Val Glu Glu Thr
 80 85 90
 Ser His Phe Val Arg Thr Thr Phe Val Ser Arg His Lys Lys Phe
 95 100 105
 Asp Glu Phe Phe Arg Glu Leu Leu Glu Asn Ala Glu Lys Ser Leu
 110 115 120
 Asn Asp Met Phe Val Arg Thr Tyr Gly Met Leu Tyr Met Gln Asn
 125 130 135
 Ser Glu Val Phe Gln Asp Leu Phe Thr Glu Leu Lys Arg Tyr Tyr
 140 145 150
 Thr Gly Gly Asn Val Asn Leu Glu Glu Met Leu Asn Asp Phe Trp
 155 160 165
 Ala Arg Leu Leu Glu Arg Met Phe Gln Leu Ile Asn Pro Gln Tyr
 170 175 180
 His Phe Ser Glu Asp Tyr Leu Glu Cys Val Ser Lys Tyr Thr Asp
 185 190 195
 Gln Leu Lys Pro Phe Gly Asp Val Pro Arg Lys Leu Lys Ile Gln

Val Thr Arg Ala Phe Ile Ala Ala Arg	Thr Phe Val Gln Gly Leu	
215	220	225
Thr Val Gly Arg Glu Val Ala Asn Arg	Val Ser Lys Val Ser Pro	
230	235	240
Thr Pro Gly Cys Ile Arg Ala Leu Met	Lys Met Leu Tyr Cys Pro	
245	250	255
Tyr Cys Arg Gly Leu Pro Thr Val Arg	Pro Cys Asn Asn Tyr Cys	
260	265	270
Leu Asn Val Met Lys Gly Cys Leu Ala	Asn Gln Ala Asp Leu Asp	
275	280	285
Thr Glu Trp Asn Leu Phe Ile Asp Ala	Met Leu Leu Val Ala Glu	
290	295	300
Arg Leu Glu Gly Pro Phe Asn Ile Glu	Ser Val Met Asp Pro Ile	
305	310	315
Asp Val Lys Ile Ser Glu Ala Ile Met	Asn Met Gln Glu Asn Ser	
320	325	330
Met Gln Val Ser Ala Lys Val Phe Gln	Gly Cys Gly Gln Pro Lys	
335	340	345
Pro Ala Pro Ala Leu Arg Ser Ala Arg	Ser Ala Pro Glu Asn Phe	
350	355	360
Asn Thr Arg Phe Arg Pro Tyr Asn Pro	Glu Glu Arg Pro Thr Thr	
365	370	375
Ala Ala Gly Thr Ser Leu Asp Arg Leu	Val Thr Asp Ile Lys Glu	
380	385	390
Lys Leu Lys Leu Ser Lys Lys Val Trp	Ser Ala Leu Pro Tyr Thr	
395	400	405
Ile Cys Lys Asp Glu Ser Val Thr Ala	Gly Thr Ser Asn Glu Glu	
410	415	420
Glu Cys Trp Asn Gly His Ser Lys Ala	Arg Tyr Leu Pro Glu Ile	
425	430	435
Met Asn Asp Gly Leu Thr Asn Gln Ile	Asn Asn Pro Glu Val Asp	
440	445	450
Val Asp Ile Thr Arg Pro Asp Thr Phe	Ile Arg Gln Gln Ile Met	
455	460	465
Ala Leu Arg Val Met Thr Asn Lys Leu	Lys Asn Ala Tyr Asn Gly	
470	475	480
Asn Asp Val Asn Phe Gln Asp Thr Ser	Asp Glu Ser Ser Gly Ser	
485	490	495

Gly Ser Gly Ser Gly Cys Met Asp Asp Val Cys Pro Thr Glu Phe
500 505 510

Glu Phe Val Thr Thr Glu Ala Pro Ala Val Asp Pro Asp Arg Arg
515 520 525

Glu Val Asp Ser Ser Ala Ala Gln Arg Gly His Ser Leu Leu Ser
530 535 540

Trp Ser Leu Thr Cys Ile Val Leu Ala Leu Gln Arg Leu Cys Arg
545 550 555

<210> 97

<211> 1894

<212> PRT

<213> Homo Sapien

<400> 97

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1 5 10 15

Gly Gly Gly Cys Thr Cys Cys Thr Thr Thr Gly Gly Gly Cys Ala
20 25 30

Gly Gly Gly Gly Thr Ala Gly Thr Gly Thr Thr Thr Gly Gly Thr
35 40 45

Gly Thr Cys Cys Cys Thr Gly Thr Cys Thr Thr Gly Cys Gly Thr
50 55 60

Gly Ala Thr Ala Thr Thr Gly Ala Cys Ala Ala Ala Cys Thr Gly
65 70 75

Ala Ala Gly Cys Thr Thr Thr Cys Cys Thr Gly Cys Ala Cys Cys
80 85 90

Ala Cys Thr Gly Gly Ala Cys Thr Thr Ala Ala Gly Gly Ala Ala
95 100 105

Gly Ala Gly Thr Gly Thr Ala Cys Thr Cys Gly Thr Ala Gly Gly
110 115 120

Cys Gly Gly Ala Cys Ala Gly Cys Thr Thr Thr Ala Gly Thr Gly
125 130 135

Gly Cys Cys Gly Gly Cys Cys Gly Gly Cys Cys Gly Cys Thr Cys
140 145 150

Thr Cys Ala Thr Cys Cys Cys Cys Cys Gly Thr Ala Ala Gly Gly
155 160 165

Ala Gly Cys Ala Gly Ala Gly Thr Cys Cys Thr Thr Thr Gly Thr
170 175 180

Ala Cys Thr Gly Ala Cys Cys Ala Ala Gly Ala Thr Gly Ala Gly
185 190 195

Cys Ala Ala Cys Ala Thr Cys Thr Ala Cys Ala Thr Cys Cys Ala

	200		205		210
Gly Gly Ala Gly Cys Cys Thr Cys Cys Cys Ala Cys Gly Ala Ala	215		220		225
Thr Gly Gly Gly Ala Ala Gly Gly Thr Thr Thr Thr Ala Thr Thr	230		235		240
Gly Ala Ala Ala Ala Cys Thr Ala Cys Ala Gly Cys Thr Gly Gly	245		250		255
Ala Gly Ala Thr Ala Thr Thr Gly Ala Cys Ala Thr Ala Gly Ala	260		265		270
Gly Thr Thr Gly Thr Gly Gly Thr Cys Cys Ala Ala Ala Gly Ala	275		280		285
Ala Gly Cys Thr Cys Cys Thr Ala Ala Ala Gly Cys Thr Thr Gly	290		295		300
Cys Ala Gly Ala Ala Ala Thr Thr Thr Thr Ala Thr Cys Cys Ala	305		310		315
Ala Cys Thr Thr Thr Gly Thr Thr Thr Gly Gly Ala Ala Gly Cys	320		325		330
Thr Thr Ala Thr Thr Ala Thr Gly Ala Cys Ala Ala Thr Ala Cys	335		340		345
Cys Ala Thr Thr Thr Thr Thr Cys Ala Thr Ala Gly Ala Gly Thr	350		355		360
Thr Gly Thr Gly Cys Cys Thr Gly Gly Thr Thr Thr Cys Ala Thr	365		370		375
Ala Gly Thr Cys Cys Ala Ala Gly Gly Cys Gly Gly Ala Gly Ala	380		385		390
Thr Cys Cys Thr Ala Cys Thr Gly Gly Cys Ala Cys Ala Gly Gly	395		400		405
Gly Ala Gly Thr Gly Gly Thr Gly Gly Ala Gly Ala Gly Thr Cys	410		415		420
Thr Ala Thr Cys Thr Ala Thr Gly Gly Ala Gly Cys Gly Cys Cys	425		430		435
Ala Thr Thr Cys Ala Ala Ala Gly Ala Thr Gly Ala Ala Thr Thr	440		445		450
Thr Cys Ala Thr Thr Cys Ala Cys Gly Gly Thr Thr Gly Cys Gly	455		460		465
Thr Thr Thr Thr Ala Ala Thr Cys Gly Gly Ala Gly Ala Gly Gly	470		475		480
Ala Cys Thr Gly Gly Thr Thr Gly Cys Cys Ala Thr Gly Gly Cys	485		490		495

Ala Ala Ala Thr	Gly Cys Thr Gly Gly	Thr Thr Cys Thr Cys	Ala
500		505	510
Thr Gly Ala Thr	Ala Ala Thr Gly Gly	Cys Ala Gly Cys Cys	Ala
515		520	525
Gly Thr Thr Thr	Thr Thr Cys Thr Thr	Cys Ala Cys Ala Cys	Thr
530		535	540
Gly Gly Gly Thr	Cys Gly Ala Gly Cys	Ala Gly Ala Thr Gly	Ala
545		550	555
Ala Cys Thr Thr	Ala Ala Cys Ala Ala	Thr Ala Ala Gly Cys	Ala
560		565	570
Thr Ala Cys Cys	Ala Thr Cys Thr Thr	Thr Gly Gly Ala Ala	Ala
575		580	585
Gly Gly Thr Thr	Ala Cys Ala Gly Gly	Gly Gly Ala Thr Ala	Cys
590		595	600
Ala Gly Thr Ala	Thr Ala Thr Ala Ala	Cys Ala Thr Gly Thr	Thr
605		610	615
Gly Cys Gly Ala	Cys Thr Gly Thr Cys	Ala Gly Ala Ala Gly	Thr
620		625	630
Ala Gly Ala Cys	Ala Thr Thr Gly Ala	Thr Gly Ala Thr Gly	Ala
635		640	645
Cys Gly Ala Ala	Ala Gly Ala Cys Cys	Ala Cys Ala Thr Ala	Ala
650		655	660
Thr Cys Cys Ala	Cys Ala Cys Ala Ala	Ala Ala Thr Ala Ala	Ala
665		670	675
Ala Ala Gly Cys	Thr Gly Thr Gly Ala	Gly Gly Thr Thr Thr	Thr
680		685	690
Gly Thr Thr Thr	Ala Ala Thr Cys Cys	Thr Thr Thr Thr Gly	Ala
695		700	705
Thr Gly Ala Cys	Ala Thr Cys Ala Thr	Thr Cys Cys Ala Ala	Gly
710		715	720
Gly Gly Ala Ala	Ala Thr Thr Ala Ala	Ala Ala Gly Gly Cys	Thr
725		730	735
Gly Ala Ala Ala	Ala Ala Ala Gly Ala	Gly Ala Ala Ala Cys	Cys
740		745	750
Ala Gly Ala Gly	Gly Ala Gly Gly Ala	Ala Gly Thr Ala Ala	Ala
755		760	765
Gly Ala Ala Ala	Thr Thr Gly Ala Ala	Ala Cys Cys Cys Ala	Ala
770		775	780
Ala Gly Gly Cys	Ala Cys Ala Ala Ala	Ala Ala Ala Thr Thr	Thr

785	790	795	
Thr Ala Gly Thr Thr Thr Ala Cys Thr Thr Thr Cys Ala Thr Thr	800	805	810
Thr Gly Gly Ala Gly Ala Gly Gly Ala Ala Gly Cys Thr Gly Ala	815	820	825
Gly Gly Ala Ala Gly Ala Ala Gly Ala Gly Gly Ala Gly Gly Ala	830	835	840
Ala Gly Thr Ala Ala Ala Thr Cys Gly Ala Gly Thr Thr Ala Gly	845	850	855
Thr Cys Ala Gly Ala Gly Cys Ala Thr Gly Ala Ala Gly Gly Gly	860	865	870
Cys Ala Ala Ala Ala Gly Cys Ala Ala Ala Ala Gly Thr Ala Gly	875	880	885
Thr Cys Ala Thr Gly Ala Cys Thr Thr Gly Cys Thr Thr Ala Ala	890	895	900
Gly Gly Ala Thr Gly Ala Thr Cys Cys Ala Cys Ala Thr Cys Thr	905	910	915
Cys Ala Gly Thr Thr Cys Thr Gly Thr Thr Cys Cys Ala Gly Thr	920	925	930
Thr Gly Thr Ala Gly Ala Ala Ala Gly Thr Gly Ala Ala Ala Ala	935	940	945
Ala Gly Gly Thr Gly Ala Thr Gly Cys Ala Cys Cys Ala Gly Ala	950	955	960
Thr Thr Thr Ala Gly Thr Thr Gly Ala Thr Gly Ala Thr Gly Gly	965	970	975
Ala Gly Ala Ala Gly Ala Thr Gly Ala Ala Ala Gly Thr Gly Cys	980	985	990
Ala Gly Ala Gly Cys Ala Thr Gly Ala Thr Gly Ala Ala Thr Ala	995	1000	1005
Thr Ala Thr Thr Gly Ala Thr Gly Gly Thr Gly Ala Thr Gly Ala	1010	1015	1020
Ala Ala Ala Gly Ala Ala Cys Cys Thr Gly Ala Thr Gly Ala Gly	1025	1030	1035
Ala Gly Ala Ala Ala Gly Ala Ala Thr Thr Gly Cys Cys Ala Ala	1040	1045	1050
Ala Ala Ala Ala Thr Thr Ala Ala Ala Ala Ala Ala Gly Gly Ala	1055	1060	1065
Cys Ala Cys Ala Ala Gly Thr Gly Cys Gly Ala Ala Thr Gly Thr	1070	1075	1080

Thr Ala Ala Ala Thr Cys Ala Gly Cys Thr Gly Gly Ala Gly Ala
1085 1090 1095

Ala Gly Gly Ala Gly Ala Ala Gly Thr Gly Gly Ala Gly Ala Ala
1100 1105 1110

Gly Ala Ala Ala Thr Cys Ala Gly Thr Cys Ala Gly Cys Cys Gly
1115 1120 1125

Cys Ala Gly Thr Gly Ala Ala Gly Ala Gly Cys Thr Cys Ala Gly
1130 1135 1140

Ala Ala Ala Ala Gly Ala Ala Gly Cys Ala Ala Gly Ala Cys Ala
1145 1150 1155

Ala Thr Thr Ala Ala Ala Ala Cys Gly Gly Gly Ala Ala Cys Thr
1160 1165 1170

Cys Thr Thr Ala Gly Cys Ala Gly Cys Ala Ala Ala Ala Cys Ala
1175 1180 1185

Ala Ala Ala Ala Ala Ala Ala Ala Gly Thr Ala Gly Ala Ala Ala Ala
1190 1195 1200

Thr Gly Cys Ala Gly Cys Ala Ala Ala Ala Cys Ala Ala Gly Cys
1205 1210 1215

Ala Gly Ala Ala Ala Ala Ala Ala Gly Ala Ala Gly Thr Gly Ala
1220 1225 1230

Ala Gly Ala Gly Gly Ala Ala Gly Ala Ala Gly Cys Cys Cys Cys
1235 1240 1245

Thr Cys Cys Ala Gly Ala Thr Gly Gly Thr Gly Cys Thr Gly Thr
1250 1255 1260

Thr Gly Cys Cys Gly Ala Ala Thr Ala Cys Ala Gly Ala Ala Gly
1265 1270 1275

Ala Gly Ala Ala Ala Ala Gly Cys Ala Ala Ala Ala Gly Thr Ala
1280 1285 1290

Thr Gly Ala Ala Gly Cys Thr Thr Thr Gly Ala Gly Gly Ala Ala
1295 1300 1305

Gly Cys Ala Ala Cys Ala Gly Thr Cys Ala Ala Ala Gly Ala Ala
1310 1315 1320

Gly Gly Gly Ala Ala Cys Thr Thr Cys Cys Cys Gly Gly Gly Ala
1325 1330 1335

Ala Gly Ala Thr Cys Ala Gly Ala Cys Cys Cys Thr Thr Gly Cys
1340 1345 1350

Ala Cys Thr Gly Cys Thr Gly Ala Ala Cys Cys Ala Gly Thr Thr
1355 1360 1365

Thr Ala Ala Ala Thr Cys Thr Ala Ala Ala Cys Thr Cys Ala Cys

1370	1375	1380
Thr Cys Ala Ala Gly Cys Ala Ala Thr Thr Gly Cys Thr Gly Ala		
1385	1390	1395
Ala Ala Cys Ala Cys Cys Thr Gly Ala Ala Ala Thr Gly Ala		
1400	1405	1410
Cys Ala Thr Thr Cys Cys Thr Gly Ala Ala Ala Cys Ala Gly Ala		
1415	1420	1425
Ala Gly Thr Ala Gly Ala Ala Gly Ala Thr Gly Ala Thr Gly Ala		
1430	1435	1440
Ala Gly Gly Ala Thr Gly Gly Ala Thr Gly Thr Cys Ala Cys Ala		
1445	1450	1455
Thr Gly Thr Ala Cys Thr Thr Cys Ala Gly Thr Thr Thr Gly Ala		
1460	1465	1470
Gly Gly Ala Thr Ala Ala Ala Ala Gly Cys Ala Gly Ala Ala Ala		
1475	1480	1485
Ala Gly Thr Gly Ala Ala Ala Gly Ala Thr Gly Cys Ala Ala Gly		
1490	1495	1500
Cys Ala Thr Gly Cys Ala Ala Gly Ala Cys Thr Cys Ala Gly Ala		
1505	1510	1515
Thr Ala Cys Ala Thr Thr Thr Gly Ala Ala Ala Thr Cys Thr Ala		
1520	1525	1530
Thr Gly Ala Thr Cys Cys Thr Cys Gly Gly Ala Ala Thr Cys Cys		
1535	1540	1545
Ala Gly Thr Gly Ala Ala Thr Ala Ala Ala Gly Ala Ala Gly		
1550	1555	1560
Gly Ala Gly Gly Gly Ala Ala Gly Ala Ala Ala Gly Cys Ala Ala		
1565	1570	1575
Ala Ala Ala Gly Cys Thr Gly Ala Thr Gly Ala Gly Ala Gly Ala		
1580	1585	1590
Gly Ala Ala Ala Ala Ala Ala Gly Ala Ala Ala Gly Ala Ala Gly		
1595	1600	1605
Ala Thr Ala Ala Ala Ala Thr Gly Ala Gly Ala Ala Thr Ala Ala		
1610	1615	1620
Thr Gly Ala Thr Ala Ala Cys Cys Ala Gly Ala Ala Cys Thr Thr		
1625	1630	1635
Gly Cys Thr Gly Gly Ala Ala Ala Thr Gly Thr Gly Cys Cys Thr		
1640	1645	1650
Ala Cys Ala Ala Thr Gly Gly Cys Cys Thr Thr Gly Thr Ala Ala		
1655	1660	1665

Cys Ala Gly Cys Cys Ala Thr Thr Gly Thr Thr Cys Cys Cys Ala
1670 1675 1680

Ala Cys Ala Gly Cys Ala Thr Cys Ala Cys Thr Thr Ala Gly Gly
1685 1690 1695

Gly Gly Thr Gly Thr Gly Ala Ala Ala Ala Gly Ala Ala Gly Thr
1700 1705 1710

Ala Thr Thr Thr Thr Thr Thr Gly Ala Ala Cys Cys Thr Gly Thr Thr
1715 1720 1725

Gly Thr Cys Thr Gly Gly Thr Thr Thr Thr Gly Ala Ala Ala Ala
1730 1735 1740

Ala Cys Ala Ala Thr Thr Ala Thr Cys Thr Thr Gly Thr Thr Thr
1745 1750 1755

Thr Gly Cys Ala Ala Ala Thr Thr Gly Thr Gly Gly Ala Ala Thr
1760 1765 1770

Gly Ala Thr Gly Thr Ala Ala Gly Cys Ala Ala Ala Thr Gly Cys
1775 1780 1785

Thr Thr Thr Thr Gly Gly Thr Thr Ala Cys Thr Gly Gly Thr Ala
1790 1795 1800

Cys Ala Thr Gly Thr Gly Thr Thr Thr Thr Thr Thr Cys Cys Thr
1805 1810 1815

Ala Gly Cys Thr Gly Ala Cys Cys Thr Thr Thr Thr Ala Thr Ala
1820 1825 1830

Thr Thr Gly Cys Thr Ala Ala Ala Thr Cys Thr Gly Ala Ala Ala
1835 1840 1845

Thr Ala Ala Ala Ala Thr Ala Ala Cys Thr Thr Thr Cys Cys Thr
1850 1855 1860

Thr Cys Cys Ala Cys Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala
1865 1870 1875

Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala
1880 1885 1890

Ala Ala Ala Ala

<210> 98
<211> 472
<212> PRT
<213> Homo Sapien

<400> 98
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Leu Leu Lys Thr Thr Ala Gly Asp Ile Asp Ile Glu Leu Trp Ser

	20		25		30									
Lys	Glu	Ala	Pro	Lys	Ala	Cys	Arg	Asn	Phe	Ile	Gln	Leu	Cys	Leu
				35					40					45
Glu	Ala	Tyr	Tyr	Asp	Asn	Thr	Ile	Phe	His	Arg	Val	Val	Pro	Gly
				50					55					60
Phe	Ile	Val	Gln	Gly	Gly	Asp	Pro	Thr	Gly	Thr	Gly	Ser	Gly	Gly
				65					70					75
Glu	Ser	Ile	Tyr	Gly	Ala	Pro	Phe	Lys	Asp	Glu	Phe	His	Ser	Arg
				80					85					90
Leu	Arg	Phe	Asn	Arg	Arg	Gly	Leu	Val	Ala	Met	Ala	Asn	Ala	Gly
				95					100					105
Ser	His	Asp	Asn	Gly	Ser	Gln	Phe	Phe	Phe	Thr	Leu	Gly	Arg	Ala
				110					115					120
Asp	Glu	Leu	Asn	Asn	Lys	His	Thr	Ile	Phe	Gly	Lys	Val	Thr	Gly
				125					130					135
Asp	Thr	Val	Tyr	Asn	Met	Leu	Arg	Leu	Ser	Glu	Val	Asp	Ile	Asp
				140					145					150
Asp	Asp	Glu	Arg	Pro	His	Asn	Pro	His	Lys	Ile	Lys	Ser	Cys	Glu
				155					160					165
Val	Leu	Phe	Asn	Pro	Phe	Asp	Asp	Ile	Ile	Pro	Arg	Glu	Ile	Lys
				170					175					180
Arg	Leu	Lys	Lys	Glu	Lys	Pro	Glu	Glu	Glu	Val	Lys	Lys	Leu	Lys
				185					190					195
Pro	Lys	Gly	Thr	Lys	Asn	Phe	Ser	Leu	Leu	Ser	Phe	Gly	Glu	Glu
				200					205					210
Ala	Glu	Glu	Glu	Glu	Glu	Glu	Val	Asn	Arg	Val	Ser	Gln	Ser	Met
				215					220					225
Lys	Gly	Lys	Ser	Lys	Ser	Ser	His	Asp	Leu	Leu	Lys	Asp	Asp	Pro
				230					235					240
His	Leu	Ser	Ser	Val	Pro	Val	Val	Glu	Ser	Glu	Lys	Gly	Asp	Ala
				245					250					255
Pro	Asp	Leu	Val	Asp	Asp	Gly	Glu	Asp	Glu	Ser	Ala	Glu	His	Asp
				260					265					270
Glu	Tyr	Ile	Asp	Gly	Asp	Glu	Lys	Asn	Leu	Met	Arg	Glu	Arg	Ile
				275					280					285
Ala	Lys	Lys	Leu	Lys	Lys	Asp	Thr	Ser	Ala	Asn	Val	Lys	Ser	Ala
				290					295					300
Gly	Glu	Gly	Glu	Val	Glu	Lys	Lys	Ser	Val	Ser	Arg	Ser	Glu	Glu
				305					310					315

Leu Arg Lys Glu Ala Arg Gln Leu Lys Arg Glu Leu Leu Ala Ala
320 325 330

Lys Gln Lys Lys Val Glu Asn Ala Ala Lys Gln Ala Glu Lys Arg
335 340 345

Ser Glu Glu Glu Glu Ala Pro Pro Asp Gly Ala Val Ala Glu Tyr
350 355 360

Arg Arg Glu Lys Gln Lys Tyr Glu Ala Leu Arg Lys Gln Gln Ser
365 370 375

Lys Lys Gly Thr Ser Arg Glu Asp Gln Thr Leu Ala Leu Leu Asn
380 385 390

Gln Phe Lys Ser Lys Leu Thr Gln Ala Ile Ala Glu Thr Pro Glu
395 400 405

Asn Asp Ile Pro Glu Thr Glu Val Glu Asp Asp Glu Gly Trp Met
410 415 420

Ser His Val Leu Gln Phe Glu Asp Lys Ser Arg Lys Val Lys Asp
425 430 435

Ala Ser Met Gln Asp Ser Asp Thr Phe Glu Ile Tyr Asp Pro Arg
440 445 450

Asn Pro Val Asn Lys Arg Arg Arg Glu Glu Ser Lys Lys Leu Met
455 460 465

Arg Glu Lys Lys Glu Arg Arg
470

<210> 99
<211> 1016
<212> DNA
<213> Homo Sapien

<400> 99
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gtctggatat tgatagccgt cctaccgctg aagtctgtgc cacacacaca 150
atttcaccag gacccaaagg agatgatggg gaaaaaggag atccaggaga 200
agagggaaaag catggcaaag tgggacgcat ggggccgaaa ggaattaaag 250
gagaactggg tgatatggga gatcagggca atattggcaa gactgggccc 300
attgggaaga agggtgacaa aggggaaaaa ggtttgcttg gaatacctgg 350
agaaaaaggc aaagcaggta ctgtctgtga ttgtggaaga taccggaaat 400
ttgttggaaca actggatatt agtattgctc ggctcaagac atctatgaag 450
tttgtcaaga atgtgatagc agggattagg gaaactgaag agaaattcta 500

ctacatcgtg caggaagaga agaactacag ggaatcccta acccactgca 550
ggattcgggg tggaatgcta gccatgcccaggatgaagc tgccaacaca 600
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cgtgaatgac cttgaaaggg agggacagta catgtccaca gacaacactc 700
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agagtgccat cttaccatgt actttgtctg tgagttcatc aagaagaaaa 850
agtaacttcc ctcatcctac gtatttgcta ttttctgtg accgtcatta 900
cagttattgt tatccatcct ttttttctg attgtactac atttgatctg 950
agtcaacata gctagaaaat gctaaactga ggtatggagc ctccatcatc 1000
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<210> 100

<211> 277

<212> PRT

<213> Homo Sapien

<400> 100

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Leu	Val	Leu	Phe	Leu	Leu	Gln	Ile	Gln	Ser	Leu	Gly	Leu	Asp	Ile	20	25	30	
Asp	Ser	Arg	Pro	Thr	Ala	Glu	Val	Cys	Ala	Thr	His	Thr	Ile	Ser	35	40	45	
Pro	Gly	Pro	Lys	Gly	Asp	Asp	Gly	Glu	Lys	Gly	Asp	Pro	Gly	Glu	50	55	60	
Glu	Gly	Lys	His	Gly	Lys	Val	Gly	Arg	Met	Gly	Pro	Lys	Gly	Ile	65	70	75	
Lys	Gly	Glu	Leu	Gly	Asp	Met	Gly	Asp	Gln	Gly	Asn	Ile	Gly	Lys	80	85	90	
Thr	Gly	Pro	Ile	Gly	Lys	Lys	Gly	Asp	Lys	Gly	Glu	Lys	Gly	Leu	95	100	105	
Leu	Gly	Ile	Pro	Gly	Glu	Lys	Gly	Lys	Ala	Gly	Thr	Val	Cys	Asp	110	115	120	
Cys	Gly	Arg	Tyr	Arg	Lys	Phe	Val	Gly	Gln	Leu	Asp	Ile	Ser	Ile	125	130	135	
Ala	Arg	Leu	Lys	Thr	Ser	Met	Lys	Phe	Val	Lys	Asn	Val	Ile	Ala	140	145	150	

Gly Ile Arg Glu Thr Glu Glu Lys Phe Tyr Tyr Ile Val Gln Glu
155 160 165

Glu Lys Asn Tyr Arg Glu Ser Leu Thr His Cys Arg Ile Arg Gly
170 175 180

Gly Met Leu Ala Met Pro Lys Asp Glu Ala Ala Asn Thr Leu Ile
185 190 195

Ala Asp Tyr Val Ala Lys Ser Gly Phe Phe Arg Val Phe Ile Gly
200 205 210

Val Asn Asp Leu Glu Arg Glu Gly Gln Tyr Met Ser Thr Asp Asn
215 220 225

Thr Pro Leu Gln Asn Tyr Ser Asn Trp Asn Glu Gly Glu Pro Ser
230 235 240

Asp Pro Tyr Gly His Glu Asp Cys Val Glu Met Leu Ser Ser Gly
245 250 255

Arg Trp Asn Asp Thr Glu Cys His Leu Thr Met Tyr Phe Val Cys
260 265 270

Glu Phe Ile Lys Lys Lys Lys
275

<210> 101
<211> 2747
<212> DNA
<213> Homo Sapien

<400> 101
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cccaaccccg acccagagct tctccagcgg cggcgagcgc agcaggggctc 100

ccgccttaa cttcctccgc ggggccagc caccttcggg agtcgggggtt 150

gccacctgc aaactctccg cttctgcac ctgccacccc tgagccagcg 200

cgggcccccg agcgagtcac ggccaacgcg gggctgcagc tgggtgggctt 250

cattctcgcc ttctgggat ggatcggcgc catcgtcagc actgccctgc 300

cccagtggag gatttactcc tatgccggcg acaacatcgt gaccgcccag 350

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Phe	Thr	Gly	Trp	Ala	Ala	Ala	Ser	Leu	Cys	Leu	Leu	Gly	Gly	Ala
				170					175					180
Leu	Leu	Cys	Cys	Ser	Cys	Pro	Arg	Lys	Thr	Thr	Ser	Tyr	Pro	Thr
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 <211> 2558
 <212> DNA
 <213> Homo Sapien

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 <211> 750
 <212> PRT
 <213> Homo Sapien

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 35 40 45
 Ser Asn Glu Ala Thr Asn Ile Thr Pro Lys His Asn Met Lys Ala
 50 55 60
 Phe Leu Asp Glu Leu Lys Ala Glu Asn Ile Lys Lys Phe Leu His
 65 70 75
 Asn Phe Thr Gln Ile Pro His Leu Ala Gly Thr Glu Gln Asn Phe
 80 85 90
 Gln Leu Ala Lys Gln Ile Gln Ser Gln Trp Lys Glu Phe Gly Leu
 95 100 105
 Asp Ser Val Glu Leu Ala His Tyr Asp Val Leu Leu Ser Tyr Pro
 110 115 120
 Asn Lys Thr His Pro Asn Tyr Ile Ser Ile Ile Asn Glu Asp Gly
 125 130 135
 Asn Glu Ile Phe Asn Thr Ser Leu Phe Glu Pro Pro Pro Pro Gly
 140 145 150
 Tyr Glu Asn Val Ser Asp Ile Val Pro Pro Phe Ser Ala Phe Ser
 155 160 165
 Pro Gln Gly Met Pro Glu Gly Asp Leu Val Tyr Val Asn Tyr Ala
 170 175 180
 Arg Thr Glu Asp Phe Phe Lys Leu Glu Arg Asp Met Lys Ile Asn
 185 190 195
 Cys Ser Gly Lys Ile Val Ile Ala Arg Tyr Gly Lys Val Phe Arg

				200						205					210
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Ser	Tyr	Pro	Asp	Gly 245	Trp	Asn	Leu	Pro		Gly 250	Gly	Gly	Val	Gln	Arg 255
Gly	Asn	Ile	Leu	Asn 260	Leu	Asn	Gly	Ala		Gly 265	Asp	Pro	Leu	Thr	Pro 270
Gly	Tyr	Pro	Ala	Asn 275	Glu	Tyr	Ala	Tyr		Arg 280	Arg	Gly	Ile	Ala	Glu 285
Ala	Val	Gly	Leu	Pro 290	Ser	Ile	Pro	Val		His 295	Pro	Ile	Gly	Tyr	Tyr 300
Asp	Ala	Gln	Lys	Leu 305	Leu	Glu	Lys	Met		Gly 310	Gly	Ser	Ala	Pro	Pro 315
Asp	Ser	Ser	Trp	Arg 320	Gly	Ser	Leu	Lys		Val 325	Pro	Tyr	Asn	Val	Gly 330
Pro	Gly	Phe	Thr	Gly 335	Asn	Phe	Ser	Thr		Gln 340	Lys	Val	Lys	Met	His 345
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Thr	Leu	Arg	Gly	Ala 365	Val	Glu	Pro	Asp		Arg 370	Tyr	Val	Ile	Leu	Gly 375
Gly	His	Arg	Asp	Ser 380	Trp	Val	Phe	Gly		Gly 385	Ile	Asp	Pro	Gln	Ser 390
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Lys	Lys	Glu	Gly	Trp 410	Arg	Pro	Arg	Arg		Thr 415	Ile	Leu	Phe	Ala	Ser 420
Trp	Asp	Ala	Glu	Glu 425	Phe	Gly	Leu	Leu		Gly 430	Ser	Thr	Glu	Trp	Ala 435
Glu	Glu	Asn	Ser	Arg 440	Leu	Leu	Gln	Glu		Arg 445	Gly	Val	Ala	Tyr	Ile 450
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Cys	Thr	Pro	Leu	Met 470	Tyr	Ser	Leu	Val		His 475	Asn	Leu	Thr	Lys	Glu 480
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Trp	Glu	Thr	Asn	Lys	Phe	Ser	Gly	Tyr	Pro	Leu	Tyr	His	Ser	Val	
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Tyr	Glu	Thr	Tyr	Glu	Leu	Val	Glu	Lys	Phe	Tyr	Asp	Pro	Met	Phe	
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Lys	Tyr	His	Leu	Thr	Val	Ala	Gln	Val	Arg	Gly	Gly	Met	Val	Phe	
				575					580					585	
Glu	Leu	Ala	Asn	Ser	Ile	Val	Leu	Pro	Phe	Asp	Cys	Arg	Asp	Tyr	
				590					595					600	
Ala	Val	Val	Leu	Arg	Lys	Tyr	Ala	Asp	Lys	Ile	Tyr	Ser	Ile	Ser	
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Met	Lys	His	Pro	Gln	Glu	Met	Lys	Thr	Tyr	Ser	Val	Ser	Phe	Asp	
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Ser	Leu	Phe	Ser	Ala	Val	Lys	Asn	Phe	Thr	Glu	Ile	Ala	Ser	Lys	
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Phe	Ser	Glu	Arg	Leu	Gln	Asp	Phe	Asp	Lys	Ser	Asn	Pro	Ile	Val	
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Leu	Arg	Met	Met	Asn	Asp	Gln	Leu	Met	Phe	Leu	Glu	Arg	Ala	Phe	
				665					670					675	
Ile	Asp	Pro	Leu	Gly	Leu	Pro	Asp	Arg	Pro	Phe	Tyr	Arg	His	Val	
				680					685					690	
Ile	Tyr	Ala	Pro	Ser	Ser	His	Asn	Lys	Tyr	Ala	Gly	Glu	Ser	Phe	
				695					700					705	
Pro	Gly	Ile	Tyr	Asp	Ala	Leu	Phe	Asp	Ile	Glu	Ser	Lys	Val	Asp	
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Pro	Ser	Lys	Ala	Trp	Gly	Glu	Val	Lys	Arg	Gln	Ile	Tyr	Val	Ala	
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 <211> 2857
 <212> DNA
 <213> Homo Sapien

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 <211> 772

<212> PRT

<213> Homo Sapien

<400> 106

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Val	Lys	Gln	Pro	Val	Arg	Ser	His	Leu	Arg	Val	Lys	Arg	Gly
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Val	Trp	Asn	Gln	Phe	Phe	Val	Pro	Glu	Glu	Met	Asn	Thr	Thr
				50					55				60
His	His	Ile	Gly	Gln	Leu	Arg	Ser	Asp	Leu	Asp	Asn	Gly	Asn
				65					70				75
Ser	Phe	Gln	Tyr	Lys	Leu	Leu	Gly	Ala	Gly	Ala	Gly	Ser	Thr
				80					85				90
Ile	Ile	Asp	Glu	Arg	Thr	Gly	Asp	Ile	Tyr	Ala	Ile	Gln	Lys
				95					100				105
Asp	Arg	Glu	Glu	Arg	Ser	Leu	Tyr	Ile	Leu	Arg	Ala	Gln	Val
				110					115				120
Asp	Ile	Ala	Thr	Gly	Arg	Ala	Val	Glu	Pro	Glu	Ser	Glu	Phe
				125					130				135
Ile	Lys	Val	Ser	Asp	Ile	Asn	Asp	Asn	Glu	Pro	Lys	Phe	Leu
				140					145				150
Glu	Pro	Tyr	Glu	Ala	Ile	Val	Pro	Glu	Met	Ser	Pro	Glu	Gly
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Leu	Val	Ile	Gln	Val	Thr	Ala	Ser	Asp	Ala	Asp	Asp	Pro	Ser
				170					175				180
Gly	Asn	Asn	Ala	Arg	Leu	Leu	Tyr	Ser	Leu	Leu	Gln	Gly	Gln
				185					190				195
Tyr	Phe	Ser	Val	Glu	Pro	Thr	Thr	Gly	Val	Ile	Arg	Ile	Ser
				200					205				210
Lys	Met	Asp	Arg	Glu	Leu	Gln	Asp	Glu	Tyr	Trp	Val	Ile	Ile
				215					220				225
Ala	Lys	Asp	Met	Ile	Gly	Gln	Pro	Gly	Ala	Leu	Ser	Gly	Thr
				230					235				240
Ser	Val	Leu	Ile	Lys	Leu	Ser	Asp	Val	Asn	Asp	Asn	Lys	Pro
				245					250				255
Phe	Lys	Glu	Ser	Leu	Tyr	Arg	Leu	Thr	Val	Ser	Glu	Ser	Ala
				260					265				270

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Gly Glu Asn Ala	Glu Met Asp Tyr Ser	Ile Glu Glu Asp Asp	Ser
	290	295	300
Gln Thr Phe Asp	Ile Ile Thr Asn His	Glu Thr Gln Glu Gly	Ile
	305	310	315
Val Ile Leu Lys	Lys Lys Val Asp Phe	Glu His Gln Asn His	Tyr
	320	325	330
Gly Ile Arg Ala	Lys Val Lys Asn His	His Val Pro Glu Gln	Leu
	335	340	345
Met Lys Tyr His	Thr Glu Ala Ser Thr	Thr Phe Ile Lys Ile	Gln
	350	355	360
Val Glu Asp Val	Asp Glu Pro Pro Leu	Phe Leu Leu Pro Tyr	Tyr
	365	370	375
Val Phe Glu Val	Phe Glu Glu Thr Pro	Gln Gly Ser Phe Val	Gly
	380	385	390
Val Val Ser Ala	Thr Asp Pro Asp Asn	Arg Lys Ser Pro Ile	Arg
	395	400	405
Tyr Ser Ile Thr	Arg Ser Lys Val Phe	Asn Ile Asn Asp Asn	Gly
	410	415	420
Thr Ile Thr Thr	Ser Asn Ser Leu Asp	Arg Glu Ile Ser Ala	Trp
	425	430	435
Tyr Asn Leu Ser	Ile Thr Ala Thr Glu	Lys Tyr Asn Ile Glu	Gln
	440	445	450
Ile Ser Ser Ile	Pro Leu Tyr Val Gln	Val Leu Asn Ile Asn	Asp
	455	460	465
His Ala Pro Glu	Phe Ser Gln Tyr Tyr	Glu Thr Tyr Val Cys	Glu
	470	475	480
Asn Ala Gly Ser	Gly Gln Val Ile Gln	Thr Ile Ser Ala Val	Asp
	485	490	495
Arg Asp Glu Ser	Ile Glu Glu His His	Phe Tyr Phe Asn Leu	Ser
	500	505	510
Val Glu Asp Thr	Asn Asn Ser Ser Phe	Thr Ile Ile Asp Asn	Gln
	515	520	525
Asp Asn Thr Ala	Val Ile Leu Thr Asn	Arg Thr Gly Phe Asn	Leu
	530	535	540
Gln Glu Glu Pro	Val Phe Tyr Ile Ser	Ile Leu Ile Ala Asp	Asn
	545	550	555
Gly Ile Pro Ser	Leu Thr Ser Thr Asn	Thr Leu Thr Ile His	Val

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 attcattttg gataggcctt tctcgcccc agactgaggt accatggctc 600
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 agctacccaa gaaaacccat ctccaaattg tgtatggatt cacgtgtcag 700
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 agctaaatga agaaatggga aaaaatcttc accacagtca gagcaatttt 1550
 attattttca tcagtatgat cataattatg attatcatct tagtaaaaag 1600
 caggaaactcc tactttttct ttatcaatta aatagctcag agagtacatc 1650

Ser Leu Asn Ser Trp Asp Gly Ser Lys Arg Gln Cys Trp Gln Leu
95 100 105

Gly Ser Asn Leu Leu Lys Ile Asp Ser Ser Asn Glu Leu Gly Phe
110 115 120

Ile Val Lys Gln Val Ser Ser Gln Pro Asp Asn Ser Phe Trp Ile
125 130 135

Gly Leu Ser Arg Pro Gln Thr Glu Val Pro Trp Leu Trp Glu Asp
140 145 150

Gly Ser Thr Phe Ser Ser Asn Leu Phe Gln Ile Arg Thr Thr Ala
155 160 165

Thr Gln Glu Asn Pro Ser Pro Asn Cys Val Trp Ile His Val Ser
170 175 180

Val Ile Tyr Asp Gln Leu Cys Ser Val Pro Ser Tyr Ser Ile Cys
185 190 195

Glu Lys Lys Phe Ser Met
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<210> 109
<211> 2819
<212> DNA
<213> Homo Sapien

<400> 109
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caaagatcgc agatcataaa gcaagctctg ctttagtttc caagaagatt 250

acaaagaatt tagagatgta tttgtcaaga tccctgtcga ttcattgcct 300

ttgggttacg gtgtcctcag tgatgcagcc ctaccctttg gtttggggac 350

attatgattt gtgtaagact cagatttaca cggaagaagg gaaagtttgg 400

gattacatgg cctgccagcc ggaatccacg gacatgacaa aatatctgaa 450

agtgaactc gatcctccgg atattacctg tggagaccct cctgagacgt 500

tctgtgcaat gggcaatccc tacatgtgca ataataagtg tgatgcgagt 550

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cagctggata caaccaagaa actcagagat ttctttacag tcacagacct 1050
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ccctcgcttg ttgaaagatt tctttgtctg atgttagtga tgcacatgtg 2150

Ala	Thr	Trp	Lys	Glu	Tyr	Pro	Lys	Pro	Leu	Gln	Val	Asn	Ile	Thr	
				125					130					135	
Leu	Ser	Trp	Ser	Lys	Thr	Ile	Glu	Leu	Thr	Asp	Asn	Ile	Val	Ile	
				140					145					150	
Thr	Phe	Glu	Ser	Gly	Arg	Pro	Asp	Gln	Met	Ile	Leu	Glu	Lys	Ser	
				155					160					165	
Leu	Asp	Tyr	Gly	Arg	Thr	Trp	Gln	Pro	Tyr	Gln	Tyr	Tyr	Ala	Thr	
				170					175					180	
Asp	Cys	Leu	Asp	Ala	Phe	His	Met	Asp	Pro	Lys	Ser	Val	Lys	Asp	
				185					190					195	
Leu	Ser	Gln	His	Thr	Val	Leu	Glu	Ile	Ile	Cys	Thr	Glu	Glu	Tyr	
				200					205					210	
Ser	Thr	Gly	Tyr	Thr	Thr	Asn	Ser	Lys	Ile	Ile	His	Phe	Glu	Ile	
				215					220					225	
Lys	Asp	Arg	Phe	Ala	Leu	Phe	Ala	Gly	Pro	Arg	Leu	Arg	Asn	Met	
				230					235					240	
Ala	Ser	Leu	Tyr	Gly	Gln	Leu	Asp	Thr	Thr	Lys	Lys	Leu	Arg	Asp	
				245					250					255	
Phe	Phe	Thr	Val	Thr	Asp	Leu	Arg	Ile	Arg	Leu	Leu	Arg	Pro	Ala	
				260					265					270	
Val	Gly	Glu	Ile	Phe	Val	Asp	Glu	Leu	His	Leu	Ala	Arg	Tyr	Phe	
				275					280					285	
Tyr	Ala	Ile	Ser	Asp	Ile	Lys	Val	Arg	Gly	Arg	Cys	Lys	Cys	Asn	
				290					295					300	
Leu	His	Ala	Thr	Val	Cys	Val	Tyr	Asp	Asn	Ser	Lys	Leu	Thr	Cys	
				305					310					315	
Glu	Cys	Glu	His	Asn	Thr	Thr	Gly	Pro	Asp	Cys	Gly	Lys	Cys	Lys	
				320					325					330	
Lys	Asn	Tyr	Gln	Gly	Arg	Pro	Trp	Ser	Pro	Gly	Ser	Tyr	Leu	Pro	
				335					340					345	
Ile	Pro	Lys	Gly	Thr	Ala	Asn	Thr	Cys	Ile	Pro	Ser	Ile	Ser	Ser	
				350					355					360	
Ile	Gly	Thr	Asn	Val	Cys	Asp	Asn	Glu	Leu	Leu	His	Cys	Gln	Asn	
				365					370					375	
Gly	Gly	Thr	Cys	His	Asn	Asn	Val	Arg	Cys	Leu	Cys	Pro	Ala	Ala	
				380					385					390	
Tyr	Thr	Gly	Ile	Leu	Cys	Glu	Lys	Leu	Arg	Cys	Glu	Glu	Ala	Gly	
				395					400					405	
Ser	Cys	Gly	Ser	Asp	Ser	Gly	Gln	Gly	Ala	Pro	Pro	His	Gly	Thr	

410 415 420
Pro Ala Leu Leu Leu Leu Thr Thr Leu Leu Gly Thr Ala Ser Pro
425 430 435
Leu Val Phe

<210> 111
<211> 2285
<212> DNA
<213> Homo Sapien

<400> 111
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taaagcgggc gcagcattaa cgcttccgc cccggtgacc tctcaggggt 200
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gtgtgtttta aggtgaagac tacagcacca cgtaggtact gtgtgaggcc 400
caacagcgga atcatcgatg caggggcctc aattaatgta tctgtgatgt 450
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gttcagtcta tgtttgctcc aactgacact tcagatatgg aagcagtatg 550
gaaggaggca aaaccggaag accttatgga ttcaaaactt agatgtgtgt 600
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gatccaccat atcatgggat ttaaatttat cataaccatg tgtaaaaaga 1050
aattaatgta tgatgacac tcacaggtct tgcctttaa ttaccctcc 1100

ctgcacacac atacacagat acacacacac aaatataatg taacgatctt 1150
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<210> 112

<211> 243

<212> PRT

<213> Homo Sapien

<400> 112

Met	Ala	Lys	Val	Glu	Gln	Val	Leu	Ser	Leu	Glu	Pro	Gln	His	Glu
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Leu Lys Phe Arg Gly Pro Phe Thr Asp Val Val Thr Thr Asn Leu

20										25					30				
Lys	Leu	Gly	Asn	Pro	Thr	Asp	Arg	Asn	Val	Cys	Phe	Lys	Val	Lys					
				35					40					45					
Thr	Thr	Ala	Pro	Arg	Arg	Tyr	Cys	Val	Arg	Pro	Asn	Ser	Gly	Ile					
				50					55					60					
Ile	Asp	Ala	Gly	Ala	Ser	Ile	Asn	Val	Ser	Val	Met	Leu	Gln	Pro					
				65					70					75					
Phe	Asp	Tyr	Asp	Pro	Asn	Glu	Lys	Ser	Lys	His	Lys	Phe	Met	Val					
				80					85					90					
Gln	Ser	Met	Phe	Ala	Pro	Thr	Asp	Thr	Ser	Asp	Met	Glu	Ala	Val					
				95					100					105					
Trp	Lys	Glu	Ala	Lys	Pro	Glu	Asp	Leu	Met	Asp	Ser	Lys	Leu	Arg					
				110					115					120					
Cys	Val	Phe	Glu	Leu	Pro	Ala	Glu	Asn	Asp	Lys	Pro	His	Asp	Val					
				125					130					135					
Glu	Ile	Asn	Lys	Ile	Ile	Ser	Thr	Thr	Ala	Ser	Lys	Thr	Glu	Thr					
				140					145					150					
Pro	Ile	Val	Ser	Lys	Ser	Leu	Ser	Ser	Ser	Leu	Asp	Asp	Thr	Glu					
				155					160					165					
Val	Lys	Lys	Val	Met	Glu	Glu	Cys	Lys	Arg	Leu	Gln	Gly	Glu	Val					
				170					175					180					
Gln	Arg	Leu	Arg	Glu	Glu	Asn	Lys	Gln	Phe	Lys	Glu	Glu	Asp	Gly					
				185					190					195					
Leu	Arg	Met	Arg	Lys	Thr	Val	Gln	Ser	Asn	Ser	Pro	Ile	Ser	Ala					
				200					205					210					
Leu	Ala	Pro	Thr	Gly	Lys	Glu	Glu	Gly	Leu	Ser	Thr	Arg	Leu	Leu					
				215					220					225					
Ala	Leu	Val	Val	Leu	Phe	Phe	Ile	Val	Gly	Val	Ile	Ile	Gly	Lys					
				230					235					240					

Ile Ala Leu

<210> 113

<211> 1493

<212> DNA

<213> Homo Sapien

<400> 113

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ccgggcgagg tgtcctcatg acttctcttg tggaccatgt ccgtgatctt 150

<400> 114

Met	Ser	Val	Ile	Phe	Phe	Ala	Cys	Val	Val	Arg	Val	Arg	Asp	Gly	1	5	10	15
Leu	Pro	Leu	Ser	Ala	Ser	Thr	Asp	Phe	Tyr	His	Thr	Gln	Asp	Phe	20	25	30	
Leu	Glu	Trp	Arg	Arg	Arg	Leu	Lys	Ser	Leu	Ala	Leu	Arg	Leu	Ala	35	40	45	
Gln	Tyr	Pro	Gly	Arg	Gly	Ser	Ala	Glu	Gly	Cys	Asp	Phe	Ser	Ile	50	55	60	
His	Phe	Ser	Ser	Phe	Gly	Asp	Val	Ala	Cys	Met	Ala	Ile	Cys	Ser	65	70	75	
Cys	Gln	Cys	Pro	Ala	Ala	Met	Ala	Phe	Cys	Phe	Leu	Glu	Thr	Leu	80	85	90	
Trp	Trp	Glu	Phe	Thr	Ala	Ser	Tyr	Asp	Thr	Thr	Cys	Ile	Gly	Leu	95	100	105	
Ala	Ser	Arg	Pro	Tyr	Ala	Phe	Leu	Glu	Phe	Asp	Ser	Ile	Ile	Gln	110	115	120	
Lys	Val	Lys	Trp	His	Phe	Asn	Tyr	Val	Ser	Ser	Ser	Gln	Met	Glu	125	130	135	
Cys	Ser	Leu	Glu	Lys	Ile	Gln	Glu	Glu	Leu	Lys	Leu	Gln	Pro	Pro	140	145	150	
Ala	Val	Leu	Thr	Leu	Glu	Asp	Thr	Asp	Val	Ala	Asn	Gly	Val	Met	155	160	165	
Asn	Gly	His	Thr	Pro	Met	His	Leu	Glu	Pro	Ala	Pro	Asn	Phe	Arg	170	175	180	
Met	Glu	Pro	Val	Thr	Ala	Leu	Gly	Ile	Leu	Ser	Leu	Ile	Leu	Asn	185	190	195	
Ile	Met	Cys	Ala	Ala	Leu	Asn	Leu	Ile	Arg	Gly	Val	His	Leu	Ala	200	205	210	
Glu	His	Ser	Leu	Gln	Asp	Pro	Arg	Ser	Trp	Phe	Cys	Trp	Leu	Asp	215	220	225	

Gln Thr Ser

<210> 115

<211> 2300

<212> DNA

<213> Homo Sapien

<400> 115

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gctcactcgc tttgacctgc tgggtgactt tggacgcttc aactggctgg 1600
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<210> 116

<211> 489

<212> PRT

<213> Homo Sapien

<400> 116

Met	Glu	Ala	Pro	Asp	Tyr	Glu	Val	Leu	Ser	Val	Arg	Glu	Gln	Leu
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Phe	His	Glu	Arg	Ile	Arg	Glu	Cys	Ile	Ile	Ser	Thr	Leu	Leu	Phe
				20					25					30
Ala	Thr	Leu	Tyr	Ile	Leu	Cys	His	Ile	Phe	Leu	Thr	Arg	Phe	Lys
				35					40					45
Lys	Pro	Ala	Glu	Phe	Thr	Thr	Val	Asp	Asp	Glu	Asp	Ala	Thr	Val
				50					55					60
Asn	Lys	Ile	Ala	Leu	Glu	Leu	Cys	Thr	Phe	Thr	Leu	Ala	Ile	Ala
				65					70					75
Leu	Gly	Ala	Val	Leu	Leu	Leu	Pro	Phe	Ser	Ile	Ile	Ser	Asn	Glu
				80					85					90
Val	Leu	Leu	Ser	Leu	Pro	Arg	Asn	Tyr	Tyr	Ile	Gln	Trp	Leu	Asn
				95					100					105
Gly	Ser	Leu	Ile	His	Gly	Leu	Trp	Asn	Leu	Val	Phe	Leu	Phe	Pro

110	115	120
Asn Leu Ser Leu Ile Phe Leu Met Pro Phe Ala Tyr Phe Phe Thr		
125	130	135
Glu Ser Glu Gly Phe Ala Gly Ser Arg Lys Gly Val Leu Gly Arg		
140	145	150
Val Tyr Glu Thr Val Val Met Leu Met Leu Leu Thr Leu Leu Val		
155	160	165
Leu Gly Met Val Trp Val Ala Ser Ala Ile Val Asp Lys Asn Lys		
170	175	180
Ala Asn Arg Glu Ser Leu Tyr Asp Phe Trp Glu Tyr Tyr Leu Pro		
185	190	195
Tyr Leu Tyr Ser Cys Ile Ser Phe Leu Gly Val Leu Leu Leu Leu		
200	205	210
Val Cys Thr Pro Leu Gly Leu Ala Arg Met Phe Ser Val Thr Gly		
215	220	225
Lys Leu Leu Val Lys Pro Arg Leu Leu Glu Asp Leu Glu Glu Gln		
230	235	240
Leu Tyr Cys Ser Ala Phe Glu Glu Ala Ala Leu Thr Arg Arg Ile		
245	250	255
Cys Asn Pro Thr Ser Cys Trp Leu Pro Leu Asp Met Glu Leu Leu		
260	265	270
His Arg Gln Val Leu Ala Leu Gln Thr Gln Arg Val Leu Leu Glu		
275	280	285
Lys Arg Arg Lys Ala Ser Ala Trp Gln Arg Asn Leu Gly Tyr Pro		
290	295	300
Leu Ala Met Leu Cys Leu Leu Val Leu Thr Gly Leu Ser Val Leu		
305	310	315
Ile Val Ala Ile His Ile Leu Glu Leu Leu Ile Asp Glu Ala Ala		
320	325	330
Met Pro Arg Gly Met Gln Gly Thr Ser Leu Gly Gln Val Ser Phe		
335	340	345
Ser Lys Leu Gly Ser Phe Gly Ala Val Ile Gln Val Val Leu Ile		
350	355	360
Phe Tyr Leu Met Val Ser Ser Val Val Gly Phe Tyr Ser Ser Pro		
365	370	375
Leu Phe Arg Ser Leu Arg Pro Arg Trp His Asp Thr Ala Met Thr		
380	385	390
Gln Ile Ile Gly Asn Cys Val Cys Leu Leu Val Leu Ser Ser Ala		
395	400	405

Leu Pro Val Phe Ser Arg Thr Leu Gly Leu Thr Arg Phe Asp Leu
 410 415 420
 Leu Gly Asp Phe Gly Arg Phe Asn Trp Leu Gly Asn Phe Tyr Ile
 425 430 435
 Val Phe Leu Tyr Asn Ala Ala Phe Ala Gly Leu Thr Thr Leu Cys
 440 445 450
 Leu Val Lys Thr Phe Thr Ala Ala Val Arg Ala Glu Leu Ile Arg
 455 460 465
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<210> 117

<211> 2764

<212> DNA

<213> Homo Sapien

<400> 117

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<210> 118
 <211> 544
 <212> PRT
 <213> Homo Sapien

<400> 118
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 35 40 45
 Pro Arg Gln Asp Trp Thr Gly Ser Thr Pro Ala Tyr Gly Tyr Trp
 50 55 60
 Phe Lys Ala Val Thr Glu Thr Thr Lys Gly Ala Pro Val Ala Thr
 65 70 75
 Asn His Gln Ser Arg Glu Val Glu Met Ser Thr Arg Gly Arg Phe
 80 85 90
 Gln Leu Thr Gly Asp Pro Ala Lys Gly Asn Cys Ser Leu Val Ile
 95 100 105
 Arg Asp Ala Gln Met Gln Asp Glu Ser Gln Tyr Phe Phe Arg Val
 110 115 120
 Glu Arg Gly Ser Tyr Val Thr Tyr Asn Phe Met Asn Asp Gly Phe
 125 130 135
 Phe Leu Lys Val Thr Val Leu Ser Phe Thr Pro Arg Pro Gln Asp
 140 145 150
 His Asn Thr Asp Leu Thr Cys His Val Asp Phe Ser Arg Lys Gly
 155 160 165

Val Ser Ala Gln Arg Thr Val Arg Leu Arg Val Ala Tyr Ala Pro	170	175	180
Arg Asp Leu Val Ile Ser Ile Ser Arg Asp Asn Thr Pro Ala Leu	185	190	195
Glu Pro Gln Pro Gln Gly Asn Val Pro Tyr Leu Glu Ala Gln Lys	200	205	210
Gly Gln Phe Leu Arg Leu Leu Cys Ala Ala Asp Ser Gln Pro Pro	215	220	225
Ala Thr Leu Ser Trp Val Leu Gln Asn Arg Val Leu Ser Ser Ser	230	235	240
His Pro Trp Gly Pro Arg Pro Leu Gly Leu Glu Leu Pro Gly Val	245	250	255
Lys Ala Gly Asp Ser Gly Arg Tyr Thr Cys Arg Ala Glu Asn Arg	260	265	270
Leu Gly Ser Gln Gln Arg Ala Leu Asp Leu Ser Val Gln Tyr Pro	275	280	285
Pro Glu Asn Leu Arg Val Met Val Ser Gln Ala Asn Arg Thr Val	290	295	300
Leu Glu Asn Leu Gly Asn Gly Thr Ser Leu Pro Val Leu Glu Gly	305	310	315
Gln Ser Leu Cys Leu Val Cys Val Thr His Ser Ser Pro Pro Ala	320	325	330
Arg Leu Ser Trp Thr Gln Arg Gly Gln Val Leu Ser Pro Ser Gln	335	340	345
Pro Ser Asp Pro Gly Val Leu Glu Leu Pro Arg Val Gln Val Glu	350	355	360
His Glu Gly Glu Phe Thr Cys His Ala Arg His Pro Leu Gly Ser	365	370	375
Gln His Val Ser Leu Ser Leu Ser Val His Tyr Lys Lys Gly Leu	380	385	390
Ile Ser Thr Ala Phe Ser Asn Gly Ala Phe Leu Gly Ile Gly Ile	395	400	405
Thr Ala Leu Leu Phe Leu Cys Leu Ala Leu Ile Ile Met Lys Ile	410	415	420
Leu Pro Lys Arg Arg Thr Gln Thr Glu Thr Pro Arg Pro Arg Phe	425	430	435
Ser Arg His Ser Thr Ile Leu Asp Tyr Ile Asn Val Val Pro Thr	440	445	450
Ala Gly Pro Leu Ala Gln Lys Arg Asn Gln Lys Ala Thr Pro Asn			

	455		460		465
Ser Pro Arg Thr	Pro Pro Pro Pro Gly	Ala Pro Ser Pro Glu Ser			
	470	475		480	
Lys Lys Asn Gln	Lys Lys Gln Tyr Gln	Leu Pro Ser Phe Pro Glu			
	485	490		495	
Pro Lys Ser Ser	Thr Gln Ala Pro Glu	Ser Gln Glu Ser Gln Glu			
	500	505		510	
Glu Leu His Tyr	Ala Thr Leu Asn Phe	Pro Gly Val Arg Pro Arg			
	515	520		525	
Pro Glu Ala Arg	Met Pro Lys Gly Thr	Gln Ala Asp Tyr Ala Glu			
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<210> 119
 <211> 3951
 <212> DNA
 <213> Homo Sapien

<400> 119
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a 3951

<210> 120
<211> 1141
<212> PRT
<213> Homo Sapien

<400> 120
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35 40 45
Gly Glu Pro Gly Ser Leu Phe Gly Phe Ser Val Ala Leu His Arg
50 55 60
Gln Leu Gln Pro Arg Pro Gln Ser Trp Leu Leu Val Gly Ala Pro
65 70 75
Gln Ala Leu Ala Leu Pro Gly Gln Gln Ala Asn Arg Thr Gly Gly
80 85 90
Leu Phe Ala Cys Pro Leu Ser Leu Glu Glu Thr Asp Cys Tyr Arg
95 100 105
Val Asp Ile Asp Gln Gly Ala Asp Met Gln Lys Glu Ser Lys Glu
110 115 120
Asn Gln Trp Leu Gly Val Ser Val Arg Ser Gln Gly Pro Gly Gly
125 130 135
Lys Ile Val Thr Cys Ala His Arg Tyr Glu Ala Arg Gln Arg Val
140 145 150
Asp Gln Ile Leu Glu Thr Arg Asp Met Ile Gly Arg Cys Phe Val
155 160 165
Leu Ser Gln Asp Leu Ala Ile Arg Asp Glu Leu Asp Gly Gly Glu
170 175 180
Trp Lys Phe Cys Glu Gly Arg Pro Gln Gly His Glu Gln Phe Gly
185 190 195
Phe Cys Gln Gln Gly Thr Ala Ala Ala Phe Ser Pro Asp Ser His

Tyr Leu Leu Phe Gly Ala Pro Gly Thr	Tyr Asn Trp Lys Gly Thr	
215	220	225
Ala Arg Val Glu Leu Cys Ala Gln Gly	Ser Ala Asp Leu Ala His	
230	235	240
Leu Asp Asp Gly Pro Tyr Glu Ala Gly	Gly Glu Lys Glu Gln Asp	
245	250	255
Pro Arg Leu Ile Pro Val Pro Ala Asn	Ser Tyr Phe Gly Phe Ser	
260	265	270
Ile Asp Ser Gly Lys Gly Leu Val Arg	Ala Glu Glu Leu Ser Phe	
275	280	285
Val Ala Gly Ala Pro Arg Ala Asn His	Lys Gly Ala Val Val Ile	
290	295	300
Leu Arg Lys Asp Ser Ala Ser Arg Leu	Val Pro Glu Val Met Leu	
305	310	315
Ser Gly Glu Arg Leu Thr Ser Gly Phe	Gly Tyr Ser Leu Ala Val	
320	325	330
Ala Asp Leu Asn Ser Asp Gly Trp Pro	Asp Leu Ile Val Gly Ala	
335	340	345
Pro Tyr Phe Phe Glu Arg Gln Glu Glu	Leu Gly Gly Ala Val Tyr	
350	355	360
Val Tyr Leu Asn Gln Gly Gly His Trp	Ala Gly Ile Ser Pro Leu	
365	370	375
Arg Leu Cys Gly Ser Pro Asp Ser Met	Phe Gly Ile Ser Leu Ala	
380	385	390
Val Leu Gly Asp Leu Asn Gln Asp Gly	Phe Pro Asp Ile Ala Val	
395	400	405
Gly Ala Pro Phe Asp Gly Asp Gly Lys	Val Phe Ile Tyr His Gly	
410	415	420
Ser Ser Leu Gly Val Val Ala Lys Pro	Ser Gln Val Leu Glu Gly	
425	430	435
Glu Ala Val Gly Ile Lys Ser Phe Gly	Tyr Ser Leu Ser Gly Ser	
440	445	450
Leu Asp Met Asp Gly Asn Gln Tyr Pro	Asp Leu Leu Val Gly Ser	
455	460	465
Leu Ala Asp Thr Ala Val Leu Phe Arg	Ala Arg Pro Ile Leu His	
470	475	480
Val Ser His Glu Val Ser Ile Ala Pro	Arg Ser Ile Asp Leu Glu	
485	490	495

Gln Tyr His Ala Val Lys Ile Pro Arg Glu Asp Arg Gln Gln Phe
1085 1090 1095

Lys Glu Glu Lys Thr Gly Thr Ile Leu Arg Asn Asn Trp Gly Ser
1100 1105 1110

Pro Arg Arg Glu Gly Pro Asp Ala His Pro Ile Leu Ala Ala Asp
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Gly His Pro Glu Leu Gly Pro Asp Gly His Pro Gly Pro Gly Thr
1130 1135 1140

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<210> 121
<211> 1532
<212> DNA
<213> Homo Sapien

<400> 121
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<210> 122
 <211> 226
 <212> PRT
 <213> Homo Sapien

<400> 122
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 20 25 30
 Tyr Cys Arg Pro Arg Asp Leu Leu Gln Arg Tyr Asp Ser Lys Pro
 35 40 45
 Ile Val Asp Leu Ile Gly Ala Met Glu Thr Gln Ser Glu Pro Ser
 50 55 60
 Glu Leu Glu Leu Asp Asp Val Val Ile Thr Asn Pro His Ile Glu
 65 70 75
 Ala Ile Leu Glu Asn Glu Asp Trp Ile Glu Asp Ala Ser Gly Leu
 80 85 90
 Met Ser His Cys Ile Ala Ile Leu Lys Ile Cys His Thr Leu Thr
 95 100 105
 Glu Lys Leu Val Ala Met Thr Met Gly Ser Gly Ala Lys Met Lys
 110 115 120
 Thr Ser Ala Ser Val Ser Asp Ile Ile Val Val Ala Lys Arg Ile
 125 130 135
 Ser Pro Arg Val Asp Asp Val Val Lys Ser Met Tyr Pro Pro Leu

	140		145		150
Asp Pro Lys Leu	Leu Asp Ala Arg Thr	Thr Ala Leu Leu Leu Ser			
	155		160		165
Val Ser His Leu	Val Leu Val Thr Arg	Asn Ala Cys His Leu Thr			
	170		175		180
Gly Gly Leu Asp	Trp Ile Asp Gln Ser	Leu Ser Ala Ala Glu Glu			
	185		190		195
His Leu Glu Val	Leu Arg Glu Ala Ala	Leu Ala Ser Glu Pro Asp			
	200		205		210
Lys Gly Leu Pro	Gly Pro Glu Gly Phe	Leu Gln Glu Gln Ser Ala			
	215		220		225

Ile

<210> 123
 <211> 1410
 <212> DNA
 <213> Homo Sapien

<400> 123
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Leu	Lys	Thr	Val	Ile	Asp	Ser	Gln	Thr	His	Tyr	Arg	Leu	Arg	Glu
				155					160				165	
Ala	Gln	Asp	Arg	Ala	Arg	Ala	Glu	Asp	Leu	Asn	Ser	Arg	Val	Ser
				170					175				180	
Tyr	Trp	Ser	Val	Gly	Glu	Thr	Ile	Ala	Leu	Phe	Val	Val	Ser	Phe
				185					190				195	
Ser	Gln	Val	Leu	Leu	Leu	Lys	Ser	Phe	Phe	Thr	Glu	Lys	Arg	Pro
				200					205				210	
Ile	Ser	Arg	Ala	Val	His	Ser								
				215										

<210> 125
 <211> 756
 <212> DNA
 <213> Homo Sapien

<400> 125
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<210> 126
 <211> 189

<212> PRT
 <213> Homo Sapien

<400> 126

Met	Glu	Glu	Gly	Gly	Asn	Leu	Gly	Gly	Leu	Ile	Lys	Met	Val	His	
1				5					10					15	
Leu	Leu	Val	Leu	Ser	Gly	Ala	Trp	Gly	Met	Gln	Met	Trp	Val	Thr	
				20					25					30	
Phe	Val	Ser	Gly	Phe	Leu	Leu	Phe	Arg	Ser	Leu	Pro	Arg	His	Thr	
				35					40					45	
Phe	Gly	Leu	Val	Gln	Ser	Lys	Leu	Phe	Pro	Phe	Tyr	Phe	His	Ile	
				50					55					60	
Ser	Met	Gly	Cys	Ala	Phe	Ile	Asn	Leu	Cys	Ile	Leu	Ala	Ser	Gln	
				65					70					75	
His	Ala	Trp	Ala	Gln	Leu	Thr	Phe	Trp	Glu	Ala	Ser	Gln	Leu	Tyr	
				80					85					90	
Leu	Leu	Phe	Leu	Ser	Leu	Thr	Leu	Ala	Thr	Val	Asn	Ala	Arg	Trp	
				95					100					105	
Leu	Glu	Pro	Arg	Thr	Thr	Ala	Ala	Met	Trp	Ala	Leu	Gln	Thr	Val	
				110					115					120	
Glu	Lys	Glu	Arg	Gly	Leu	Gly	Gly	Glu	Val	Pro	Gly	Ser	His	Gln	
				125					130					135	
Gly	Pro	Asp	Pro	Tyr	Arg	Gln	Leu	Arg	Glu	Lys	Asp	Pro	Lys	Tyr	
				140					145					150	
Ser	Ala	Leu	Arg	Gln	Asn	Phe	Phe	Arg	Tyr	His	Gly	Leu	Ser	Ser	
				155					160					165	
Leu	Cys	Asn	Leu	Gly	Cys	Val	Leu	Ser	Asn	Gly	Leu	Cys	Leu	Ala	
				170					175					180	
Gly	Leu	Ala	Leu	Glu	Ile	Arg	Ser	Leu							
				185											

<210> 127
 <211> 1027
 <212> DNA
 <213> Homo Sapien

<220>
 <221> unsure
 <222> 1017, 1020
 <223> unknown base

<400> 127

gcttcatttc tcccgaactca gcttcccacc ctgggctttc cgaggtgctt 50
 tcgccgtgt ccccaact gcagccatga tctccttaac ggacacgcag 100

Phe	Val	Val	Leu	Ile	Gly	Trp	Pro	Leu	Ile	Gly	Met	Ile	Phe	Glu
				80					85					90
Ile	Tyr	Gly	Phe	Phe	Leu	Leu	Phe	Arg	Gly	Phe	Phe	Pro	Val	Val
				95					100					105
Val	Gly	Phe	Ile	Arg	Arg	Val	Pro	Val	Leu	Gly	Ser	Leu	Leu	Asn
				110					115					120
Leu	Pro	Gly	Ile	Arg	Ser	Phe	Val	Asp	Lys	Val	Gly	Glu	Ser	Asn
				125					130					135
Asn Met Val														

<210> 129
 <211> 1508
 <212> DNA
 <213> Homo Sapien

<400> 129
 aattcagatt ttaagcccat tctgcagtgg aatttcatga actagcaaga 50
 ggacaccatc ttcttgtatt atacaagaaa ggagtgtacc tatcacacac 100
 agggggaaaa atgctctttt gggtgctagg cctcctaata ctctgtggtt 150
 ttctgtggac tcgtaaagga aaactaaaga ttgaagacat cactgataag 200
 tacattttta tcaactggatg tgactcgggc ttgggaaact tggcagccag 250
 aacttttcat aaaaagggat ttcatgtaat cgctgcctgt ctgactgaat 300
 caggatcaac agctttaaaag gcagaaacct cagagagact tcgtactgtg 350
 cttctggatg tgaccgaccc agagaatgtc aagaggactg cccagtgggt 400
 gaagaaccaa gttggggaga aaggctctctg gggctctgat aataatgctg 450
 gtgttcccg cgtgctggct cccactgact ggctgacact agaggactac 500
 agagaaccta ttgaagtga cctgtttgga ctcatactgt tgacactaaa 550
 tatgcttcct ttggtcaaga aagctcaagg gagagttatt aatgtctcca 600
 gtgttggagg tcgccttgca atcgttggag ggggctatac tccatccaaa 650
 tatgcagtgg aaggtttcaa tgacagctta agacgggaca tgaaagcttt 700
 tgggtgtcac gtctcatgca ttgaaccagg attgttcaaa acaaacttgg 750
 cagatccagt aaaggttaatt gaaaaaaaaac tcgccatttg ggagcagctg 800
 tctccagaca tcaaacaaca atatggagaa gggttacattg aaaaaagtct 850
 agacaaaactg aaaggcaata aatcctatgt gaacatggac ctctctccgg 900
 tggtagagtg catggaccac gctctaacaa gtctcttccc taagactcat 950

tatgccgctg gaaaagatgc caaaattttc tggatacctc tgtctcacat 1000
gccagcagct ttgcaagact ttttattggt gaaacagaaa gcagagctgg 1050
ctaattccaa ggcaagtgtga ctcagctaac cacaaatgtc tcctccaggc 1100
tatgaaattg gccgatttca agaacacatc tccttttcaa ccccatctct 1150
tatctgctcc aacctggact catttagatc gtgcttattt ggattgcaaa 1200
agggagtcct accatcgctg gtggtatccc aggggtccctg ctcaagtttt 1250
ctttgaaaag gagggctgga atggtacatc acataggcaa gtcctgccct 1300
gtatttaggc ttgacctgct tgggtgtgat taagggaat tgaaagactt 1350
gcccattcaa aatgatcttt accgtggcct gcccattgct tatgggtccc 1400
agcatttaca gtaacttgct aatgttaagt atcatctctt atctaaatat 1450
taaaagataa gtcaacccaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1500
aaaaaaaa 1508

<210> 130
<211> 319
<212> PRT
<213> Homo Sapien

<400> 130
Met Leu Phe Trp Val Leu Gly Leu Leu Ile Leu Cys Gly Phe Leu
1 5 10 15
Trp Thr Arg Lys Gly Lys Leu Lys Ile Glu Asp Ile Thr Asp Lys
20 25 30
Tyr Ile Phe Ile Thr Gly Cys Asp Ser Gly Phe Gly Asn Leu Ala
35 40 45
Ala Arg Thr Phe Asp Lys Lys Gly Phe His Val Ile Ala Ala Cys
50 55 60
Leu Thr Glu Ser Gly Ser Thr Ala Leu Lys Ala Glu Thr Ser Glu
65 70 75
Arg Leu Arg Thr Val Leu Leu Asp Val Thr Asp Pro Glu Asn Val
80 85 90
Lys Arg Thr Ala Gln Trp Val Lys Asn Gln Val Gly Glu Lys Gly
95 100 105
Leu Trp Gly Leu Ile Asn Asn Ala Gly Val Pro Gly Val Leu Ala
110 115 120
Pro Thr Asp Trp Leu Thr Leu Glu Asp Tyr Arg Glu Pro Ile Glu
125 130 135
Val Asn Leu Phe Gly Leu Ile Ser Val Thr Leu Asn Met Leu Pro

140	145	150
Leu Val Lys Lys Ala Gln Gly Arg Val	Ile Asn Val Ser Ser Val	
155	160	165
Gly Gly Arg Leu Ala Ile Val Gly Gly	Gly Tyr Thr Pro Ser Lys	
170	175	180
Tyr Ala Val Glu Gly Phe Asn Asp Ser	Leu Arg Arg Asp Met Lys	
185	190	195
Ala Phe Gly Val His Val Ser Cys Ile	Glu Pro Gly Leu Phe Lys	
200	205	210
Thr Asn Leu Ala Asp Pro Val Lys Val	Ile Glu Lys Lys Leu Ala	
215	220	225
Ile Trp Glu Gln Leu Ser Pro Asp Ile	Lys Gln Gln Tyr Gly Glu	
230	235	240
Gly Tyr Ile Glu Lys Ser Leu Asp Lys	Leu Lys Gly Asn Lys Ser	
245	250	255
Tyr Val Asn Met Asp Leu Ser Pro Val	Val Glu Cys Met Asp His	
260	265	270
Ala Leu Thr Ser Leu Phe Pro Lys Thr	His Tyr Ala Ala Gly Lys	
275	280	285
Asp Ala Lys Ile Phe Trp Ile Pro Leu	Ser His Met Pro Ala Ala	
290	295	300
Leu Gln Asp Phe Leu Leu Leu Lys Gln	Lys Ala Glu Leu Ala Asn	
305	310	315
Pro Lys Ala Val		

<210> 131
 <211> 1818
 <212> DNA
 <213> Homo Sapien

<400> 131
 agacagtacc tcctccctag gactacacaa ggactgaacc agaaggaaga 50
 ggacagagca aagccatgaa catcatccta gaaatccttc tgcttctgat 100
 caccatcatc tactcctact tggagtcggt ggtgaagttt ttcattcctc 150
 agaggagaaa atctgtggct ggggagattg ttctcattac tggagctggg 200
 catggaatag gcaggcagac tacttatgaa tttgcaaaac gacagagcat 250
 attggttctg tgggatatta ataagcgcg tgtggaggaa actgcagctg 300
 agtgccgaaa actaggcgtc actgcgcatg cgtatgtggt agactgcagc 350

atggacccaa gagaagaa 1818

<210> 132

<211> 300

<212> PRT

<213> Homo Sapien

<400> 132

Met	Asn	Ile	Ile	Leu	Glu	Ile	Leu	Leu	Leu	Leu	Ile	Thr	Ile	Ile	
1				5					10					15	
Tyr	Ser	Tyr	Leu	Glu	Ser	Leu	Val	Lys	Phe	Phe	Ile	Pro	Gln	Arg	
			20						25					30	
Arg	Lys	Ser	Val	Ala	Gly	Glu	Ile	Val	Leu	Ile	Thr	Gly	Ala	Gly	
			35						40					45	
His	Gly	Ile	Gly	Arg	Gln	Thr	Thr	Tyr	Glu	Phe	Ala	Lys	Arg	Gln	
			50						55					60	
Ser	Ile	Leu	Val	Leu	Trp	Asp	Ile	Asn	Lys	Arg	Gly	Val	Glu	Glu	
			65						70					75	
Thr	Ala	Ala	Glu	Cys	Arg	Lys	Leu	Gly	Val	Thr	Ala	His	Ala	Tyr	
			80						85					90	
Val	Val	Asp	Cys	Ser	Asn	Arg	Glu	Glu	Ile	Tyr	Arg	Ser	Leu	Asn	
			95						100					105	
Gln	Val	Lys	Lys	Glu	Val	Gly	Asp	Val	Thr	Ile	Val	Val	Asn	Asn	
			110						115					120	
Ala	Gly	Thr	Val	Tyr	Pro	Ala	Asp	Leu	Leu	Ser	Thr	Lys	Asp	Glu	
			125						130					135	
Glu	Ile	Thr	Lys	Thr	Phe	Glu	Val	Asn	Ile	Leu	Gly	His	Phe	Trp	
			140						145					150	
Ile	Thr	Lys	Ala	Leu	Leu	Pro	Ser	Met	Met	Glu	Arg	Asn	His	Gly	
			155						160					165	
His	Ile	Val	Thr	Val	Ala	Ser	Val	Cys	Gly	His	Glu	Gly	Ile	Pro	
			170						175					180	
Tyr	Leu	Ile	Pro	Tyr	Cys	Ser	Ser	Lys	Phe	Ala	Ala	Val	Gly	Phe	
			185						190					195	
His	Arg	Gly	Leu	Thr	Ser	Glu	Leu	Gln	Ala	Leu	Gly	Lys	Thr	Gly	
			200						205					210	
Ile	Lys	Thr	Ser	Cys	Leu	Cys	Pro	Val	Phe	Val	Asn	Thr	Gly	Phe	
			215						220					225	
Thr	Lys	Asn	Pro	Ser	Thr	Arg	Leu	Trp	Pro	Val	Leu	Glu	Thr	Asp	
			230						235					240	
Glu	Val	Val	Arg	Ser	Leu	Ile	Asp	Gly	Ile	Leu	Thr	Asn	Lys	Lys	
			245						250					255	

Met	Ile	Phe	Val	Pro	Ser	Tyr	Ile	Asn	Ile	Phe	Leu	Arg	Leu	Gln
				260					265					270
Lys	Phe	Leu	Pro	Glu	Arg	Ala	Ser	Ala	Ile	Leu	Asn	Arg	Met	Gln
				275					280					285
Asn	Ile	Gln	Phe	Glu	Ala	Val	Val	Gly	His	Lys	Ile	Lys	Met	Lys
				290					295					300

<210> 133

<211> 1849

<212> DNA

<213> Homo Sapien

<400> 133

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ctgaggcggc ggtagcatgg agggggagag tacgtcggcg gtgctctcgg 50
gctttgtgct cggcgactc gctttccagc acctcaacac ggactcggac 100
acggaagggtt ttcttcttgg ggaagtaaaa ggtgaagcca agaacagcat 150
tactgattcc caaatggatg atgttgaagt tgtttataca attgacattc 200
agaaatatat tccatgctat cagcttttta gcttttataa ttcttcaggc 250
gaagtaaatag agcaagcact gaagaaaata ttatcaaata tcaaaaagaa 300
tgtggtaggt tggatcaaat tccgtcgtca ttcagatcag atcatgacgt 350
ttagagagag gctgcttcac aaaaacttgc aggagcattt ttcaaaccac 400
gacctgtttt ttctgctatt aacaccaagt ataataacag aaagctgctc 450
tactcatoga ctggaacatt ccttatataa acctcaaaaa ggactttttc 500
acagggtacc tttagtgggt gccaatctgg gcatgtctga acaactgggt 550
tataaaactg tatcagggtc ctgtatgtcc actgggttta gccgagcagt 600
acaaacacac agctctaaat tttttgaaga agatggatcc ttaaaggagg 650
tacataagat aaatgaaatg tatgcttcat tacaagagga attaaagagt 700
atatgcaaaa aagtggaaga cagtgaacaa gcagtagata aactagtaaa 750
ggatgtaaac agattaaaac gagaaattga gaaaaggaga ggagcacaga 800
ttcaggcagc aagagagaag aacatccaaa aagaccctca ggagaacatt 850
tttctttgtc aggcattacg gacctttttt ccaaattctg aatttcttca 900
ttcatgtgtt atgtctttta aaaatagaca tgtttctaaa agtagctgta 950
actacaacca ccatctcgat gtagtagaca atctgacctt aatggtagaa 1000
cacactgaca ttctgaagc tagtccagct agtacaccac aaatcattaa 1050
gcataaagcc ttagacttag atgacagatg gcaattcaag agatctcggg 1100

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tgtagatac acaagacaaa cgatctaaag caaatactgg tagtagtaac 1150
 caagataaag catccaaaat gagcagccca gaaacagatg aagaaattga 1200
 aaagatgaag gggtttggtg aatattcacg gtctcctaca ttttgatcct 1250
 tttaacctta caaggagatt tttttatttg gctgatgggt aaagccaaac 1300
 atttctattg tttttactat gttgagctac ttgcagtaag ttcatttggt 1350
 ttactatgt tcacctgttt gcagtaatac acagataact cttagtgcac 1400
 ttacttcaca aagtactttt tcaaacatca gatgctttta tttccaaacc 1450
 tttttttcac ctttctactaa gttggtgagg ggaaggctta cacagacaca 1500
 ttcttttagaa ttggaaaagt gagaccaggc acagtggctc acacctgtaa 1550
 tcccagcact tagggaagac aagtcaggag gattgattga agctaggagt 1600
 tagagaccag cctgggcaac gtattgagac catgtctatt aaaaaataaa 1650
 atggaaaagc aagaatagcc ttattttcaa aatatggaaa gaaatttata 1700
 tgaaaattta tctgagtcac taaaattctc cttaagtgat acttttttag 1750
 aagtacatta tggctagagt tgccagataa aatgctggat atcatgcaat 1800
 aaatttgcaa aacatcatct aaaatttaaa aaaaaaaaaa aaaaaaaaaa 1849

<210> 134
 <211> 409
 <212> PRT
 <213> Homo Sapien

<400> 134
 Met Glu Gly Glu Ser Thr Ser Ala Val Leu Ser Gly Phe Val Leu
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 Gly Ala Leu Ala Phe Gln His Leu Asn Thr Asp Ser Asp Thr Glu
 20 25 30
 Gly Phe Leu Leu Gly Glu Val Lys Gly Glu Ala Lys Asn Ser Ile
 35 40 45
 Thr Asp Ser Gln Met Asp Asp Val Glu Val Val Tyr Thr Ile Asp
 50 55 60
 Ile Gln Lys Tyr Ile Pro Cys Tyr Gln Leu Phe Ser Phe Tyr Asn
 65 70 75
 Ser Ser Gly Glu Val Asn Glu Gln Ala Leu Lys Lys Ile Leu Ser
 80 85 90
 Asn Val Lys Lys Asn Val Val Gly Trp Tyr Lys Phe Arg Arg His
 95 100 105
 Ser Asp Gln Ile Met Thr Phe Arg Glu Arg Leu Leu His Lys Asn

Leu	Gln	Glu	His	Phe	Ser	Asn	Gln	Asp	Leu	Val	Phe	Leu	Leu	Leu
				125					130					135
Thr	Pro	Ser	Ile	Ile	Thr	Glu	Ser	Cys	Ser	Thr	His	Arg	Leu	Glu
				140					145					150
His	Ser	Leu	Tyr	Lys	Pro	Gln	Lys	Gly	Leu	Phe	His	Arg	Val	Pro
				155					160					165
Leu	Val	Val	Ala	Asn	Leu	Gly	Met	Ser	Glu	Gln	Leu	Gly	Tyr	Lys
				170					175					180
Thr	Val	Ser	Gly	Ser	Cys	Met	Ser	Thr	Gly	Phe	Ser	Arg	Ala	Val
				185					190					195
Gln	Thr	His	Ser	Ser	Lys	Phe	Phe	Glu	Glu	Asp	Gly	Ser	Leu	Lys
				200					205					210
Glu	Val	His	Lys	Ile	Asn	Glu	Met	Tyr	Ala	Ser	Leu	Gln	Glu	Glu
				215					220					225
Leu	Lys	Ser	Ile	Cys	Lys	Lys	Val	Glu	Asp	Ser	Glu	Gln	Ala	Val
				230					235					240
Asp	Lys	Leu	Val	Lys	Asp	Val	Asn	Arg	Leu	Lys	Arg	Glu	Ile	Glu
				245					250					255
Lys	Arg	Arg	Gly	Ala	Gln	Ile	Gln	Ala	Ala	Arg	Glu	Lys	Asn	Ile
				260					265					270
Gln	Lys	Asp	Pro	Gln	Glu	Asn	Ile	Phe	Leu	Cys	Gln	Ala	Leu	Arg
				275					280					285
Thr	Phe	Phe	Pro	Asn	Ser	Glu	Phe	Leu	His	Ser	Cys	Val	Met	Ser
				290					295					300
Leu	Lys	Asn	Arg	His	Val	Ser	Lys	Ser	Ser	Cys	Asn	Tyr	Asn	His
				305					310					315
His	Leu	Asp	Val	Val	Asp	Asn	Leu	Thr	Leu	Met	Val	Glu	His	Thr
				320					325					330
Asp	Ile	Pro	Glu	Ala	Ser	Pro	Ala	Ser	Thr	Pro	Gln	Ile	Ile	Lys
				335					340					345
His	Lys	Ala	Leu	Asp	Leu	Asp	Asp	Arg	Trp	Gln	Phe	Lys	Arg	Ser
				350					355					360
Arg	Leu	Leu	Asp	Thr	Gln	Asp	Lys	Arg	Ser	Lys	Ala	Asn	Thr	Gly
				365					370					375
Ser	Ser	Asn	Gln	Asp	Lys	Ala	Ser	Lys	Met	Ser	Ser	Pro	Glu	Thr
				380					385					390
Asp	Glu	Glu	Ile	Glu	Lys	Met	Lys	Gly	Phe	Gly	Glu	Tyr	Ser	Arg
				395					400					405

Ser Pro Thr Phe

<210> 135

<211> 2651

<212> DNA

<213> Homo Sapien

<400> 135

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acgagcggac cagcgcaggg cagcccaagc agcgcgcagc gaacgcccgc 100
cgccgcccac accctctgcg gtccccgcgg cgcttgccac ccttccctcc 150
ttccccgcgt ccccgccctcg ccggccagtc agcttgccgg gttcgctgcc 200
ccgcgaaacc ccgaggtcac cagcccgcgc ctctgcttcc ctgggcccgc 250
cgccgcctcc acgccctcct tctcccctgg cccgggcgct ggcaccgggg 300
accgttgctt gacgcgaggg ccagctctac ttttcgcccc gcgtctcttc 350
cgctgctcg cctcttccac caactccaac tccttctccc tcagctcca 400
ctcgetagtc cccgactccg ccagccctcg gcccgcctgcc gtagcgccgc 450
ttcccgtccg gtcccaaagg tgggaacgcg tccgccccgg ccgcacccat 500
ggcacggttc ggcttgcccc cgcttctctg caccctggca gtgctcagcg 550
ccgcgctgct ggctgccgag ctcaagtcga aaagtgtgctc ggaagtgcga 600
cgtcttttacg tgtccaaagg cttcaacaag aacgatgcc cctccacga 650
gatcaacggg gatcatttga agatctgtcc ccagggttct acctgctgct 700
ctcaagagat ggaggagaag tacagcctgc aaagtaaaga tgatttcaaa 750
agtgtggtca gcgaacagtg caatcatttg caagctgtct ttgcttcacg 800
ttacaagaag tttgatgaat tcttcaaaga actacttgaa aatgcagaga 850
aatccctgaa tgatatgttt gtgaagacat atggccattt atacatgcaa 900
aattctgagc tatttaaaga tctcttcgta gagttgaaac gttactacgt 950
gggtgggaaat gtgaacctgg aagaaatgct aaatgacttc tgggctcgcc 1000
tcttgagcgc gatgttccgc ctggtgaact cccagtacca ctttacagat 1050
gagtatctgg aatgtgtgag caagtatacg gagcagctga agcccttcgg 1100
agatgtccct cgcaaattga agctccaggt tactcgtgct tttgtagcag 1150
cccgtacttt cgctcaaggc ttagcgggtg cgggagatgt cgtgagcaag 1200
gtctccgtgg taaaccccac agcccagtgt acccatgccc tgttgaagat 1250

<210> 136
 <211> 556
 <212> PRT
 <213> Homo Sapien

<400> 136

Met	Ala	Arg	Phe	Gly	Leu	Pro	Ala	Leu	Leu	Cys	Thr	Leu	Ala	Val	1	5	10	15
Leu	Ser	Ala	Ala	Leu	Leu	Ala	Ala	Glu	Leu	Lys	Ser	Lys	Ser	Cys	20	25	30	
Ser	Glu	Val	Arg	Arg	Leu	Tyr	Val	Ser	Lys	Gly	Phe	Asn	Lys	Asn	35	40	45	
Asp	Ala	Pro	Leu	His	Glu	Ile	Asn	Gly	Asp	His	Leu	Lys	Ile	Cys	50	55	60	
Pro	Gln	Gly	Ser	Thr	Cys	Cys	Ser	Gln	Glu	Met	Glu	Glu	Lys	Tyr	65	70	75	
Ser	Leu	Gln	Ser	Lys	Asp	Asp	Phe	Lys	Ser	Val	Val	Ser	Glu	Gln	80	85	90	
Cys	Asn	His	Leu	Gln	Ala	Val	Phe	Ala	Ser	Arg	Tyr	Lys	Lys	Phe	95	100	105	
Asp	Glu	Phe	Phe	Lys	Glu	Leu	Leu	Glu	Asn	Ala	Glu	Lys	Ser	Leu	110	115	120	
Asn	Asp	Met	Phe	Val	Lys	Thr	Tyr	Gly	His	Leu	Tyr	Met	Gln	Asn	125	130	135	
Ser	Glu	Leu	Phe	Lys	Asp	Leu	Phe	Val	Glu	Leu	Lys	Arg	Tyr	Tyr	140	145	150	
Val	Val	Gly	Asn	Val	Asn	Leu	Glu	Glu	Met	Leu	Asn	Asp	Phe	Trp	155	160	165	
Ala	Arg	Leu	Leu	Glu	Arg	Met	Phe	Arg	Leu	Val	Asn	Ser	Gln	Tyr	170	175	180	
His	Phe	Thr	Asp	Glu	Tyr	Leu	Glu	Cys	Val	Ser	Lys	Tyr	Thr	Glu	185	190	195	
Gln	Leu	Lys	Pro	Phe	Gly	Asp	Val	Pro	Arg	Lys	Leu	Lys	Leu	Gln	200	205	210	
Val	Thr	Arg	Ala	Phe	Val	Ala	Ala	Arg	Thr	Phe	Ala	Gln	Gly	Leu	215	220	225	
Ala	Val	Ala	Gly	Asp	Val	Val	Ser	Lys	Val	Ser	Val	Val	Asn	Pro	230	235	240	
Thr	Ala	Gln	Cys	Thr	His	Ala	Leu	Leu	Lys	Met	Ile	Tyr	Cys	Ser	245	250	255	
His	Cys	Arg	Gly	Leu	Val	Thr	Val	Lys	Pro	Cys	Tyr	Asn	Tyr	Cys				

Ser	Asn	Ile	Met	Arg	Gly	Cys	Leu	Ala	Asn	Gln	Gly	Asp	Leu	Asp	260	265	270
				275					280					285			
Phe	Glu	Trp	Asn	Asn	Phe	Ile	Asp	Ala	Met	Leu	Met	Val	Ala	Glu			
				290					295					300			
Arg	Leu	Glu	Gly	Pro	Phe	Asn	Ile	Glu	Ser	Val	Met	Asp	Pro	Ile			
				305					310					315			
Asp	Val	Lys	Ile	Ser	Asp	Ala	Ile	Met	Asn	Met	Gln	Asp	Asn	Ser			
				320					325					330			
Val	Gln	Val	Ser	Gln	Lys	Val	Phe	Gln	Gly	Cys	Gly	Pro	Pro	Lys			
				335					340					345			
Pro	Leu	Pro	Ala	Gly	Arg	Ile	Ser	Arg	Ser	Ile	Ser	Glu	Ser	Ala			
				350					355					360			
Phe	Ser	Ala	Arg	Phe	Arg	Pro	His	His	Pro	Glu	Glu	Arg	Pro	Thr			
				365					370					375			
Thr	Ala	Ala	Gly	Thr	Ser	Leu	Asp	Arg	Leu	Val	Thr	Asp	Val	Lys			
				380					385					390			
Glu	Lys	Leu	Lys	Gln	Ala	Lys	Lys	Phe	Trp	Ser	Ser	Leu	Pro	Ser			
				395					400					405			
Asn	Val	Cys	Asn	Asp	Glu	Arg	Met	Ala	Ala	Gly	Asn	Gly	Asn	Glu			
				410					415					420			
Asp	Asp	Cys	Trp	Asn	Gly	Lys	Gly	Lys	Ser	Arg	Tyr	Leu	Phe	Ala			
				425					430					435			
Val	Thr	Gly	Asn	Gly	Leu	Ala	Asn	Gln	Gly	Asn	Asn	Pro	Glu	Val			
				440					445					450			
Gln	Val	Asp	Thr	Ser	Lys	Pro	Asp	Ile	Leu	Ile	Leu	Arg	Gln	Ile			
				455					460					465			
Met	Ala	Leu	Arg	Val	Met	Thr	Ser	Lys	Met	Lys	Asn	Ala	Tyr	Asn			
				470					475					480			
Gly	Asn	Asp	Val	Asp	Phe	Phe	Asp	Ile	Ser	Asp	Glu	Ser	Ser	Gly			
				485					490					495			
Glu	Gly	Ser	Gly	Ser	Gly	Cys	Glu	Tyr	Gln	Gln	Cys	Pro	Ser	Glu			
				500					505					510			
Phe	Asp	Tyr	Asn	Ala	Thr	Asp	His	Ala	Gly	Lys	Ser	Ala	Asn	Glu			
				515					520					525			
Lys	Ala	Asp	Ser	Ala	Gly	Val	Arg	Pro	Gly	Ala	Gln	Ala	Tyr	Leu			
				530					535					540			
Leu	Thr	Val	Phe	Cys	Ile	Leu	Phe	Leu	Val	Met	Gln	Arg	Glu	Trp			
				545					550					555			

Arg

<210> 137

<211> 2720

<212> DNA

<213> Homo Sapien

<400> 137

gcgggctggt gacggcgctg cgatggctgc ctgcgagggc aggagaagcg 50
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gcccgcttggg ccgtcgccac cactgtagtc atgtaccac ccgccgccgc 150
gccgcctcat cgggacttca tctcggtgac gctgagcttt ggcgagagct 200
atgacaacag caagagttgg cggcggcgct cgtgctggag gaaatggaag 250
caactgtcga gattgcagcg gaatatgatt ctcttcctcc ttgcctttct 300
gcttttctgt ggactcctct tctacatcaa cttggctgac cattggaaag 350
ctctggcttt caggctagag gaagagcaga agatgaggcc agaaattgct 400
gggttaaaac cagcaaatcc acccgtctta ccagctcctc agaaggcgga 450
caccgaccct gagaacttac ctgagatttc gtcacagaag acacaaagac 500
acatccagcg gggaccacct cacctgcaga ttagaccccc aagccaagac 550
ctgaaggatg ggaccagga ggaggccaca aaaaggcaag aagcccctgt 600
ggatccccgc ccggaaggag atccgcagag gacagtcac agctggaggg 650
gagcgggtgat cgagcctgag cagggcaccg agctcccttc aagaagagca 700
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gtgtccaggt ccttcagtga gtggtttggc ctcggtctca cactgatcga 900
cgcgctggac accatgtgga tcttgggtct gaggaaagaa tttgaggaag 950
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ccacctgtct ggggacagcc tcttcctgag gaaagctgag gattttggaa 1100
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cactgtggcc gaggtgacca gcattcagct ggagttccgg gagctctccc 1250

gtctcacagg ggataagaag tttcaggagg cagtggagaa ggtgacacag 1300
cacatccacg gcctgtcttg gaagaaggat gggctggtgc ccatgttcat 1350
caatacccac agtggcctct tcacccacct gggcgtattc acgctgggcg 1400
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cctcctcgtc tctgctttaa tcaggacacc gtgaggacaa gtgaggccgt 2300
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ttgatttgct ctaaccgcaa 2720

<210> 138

<211> 699

<212> PRT

<213> Homo Sapien

<400> 138

Met	Ala	Ala	Cys	Glu	Gly	Arg	Arg	Ser	Gly	Ala	Leu	Gly	Ser	Ser	
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Gln	Ser	Asp	Phe	Leu	Thr	Pro	Pro	Val	Gly	Gly	Ala	Pro	Trp	Ala	
				20					25					30	
Val	Ala	Thr	Thr	Val	Val	Met	Tyr	Pro	Pro	Pro	Pro	Pro	Pro	Pro	
				35					40					45	
His	Arg	Asp	Phe	Ile	Ser	Val	Thr	Leu	Ser	Phe	Gly	Glu	Ser	Tyr	
				50					55					60	
Asp	Asn	Ser	Lys	Ser	Trp	Arg	Arg	Arg	Ser	Cys	Trp	Arg	Lys	Trp	
				65					70					75	
Lys	Gln	Leu	Ser	Arg	Leu	Gln	Arg	Asn	Met	Ile	Leu	Phe	Leu	Leu	
				80					85					90	
Ala	Phe	Leu	Leu	Phe	Cys	Gly	Leu	Leu	Phe	Tyr	Ile	Asn	Leu	Ala	
				95					100					105	
Asp	His	Trp	Lys	Ala	Leu	Ala	Phe	Arg	Leu	Glu	Glu	Glu	Gln	Lys	
				110					115					120	
Met	Arg	Pro	Glu	Ile	Ala	Gly	Leu	Lys	Pro	Ala	Asn	Pro	Pro	Val	
				125					130					135	
Leu	Pro	Ala	Pro	Gln	Lys	Ala	Asp	Thr	Asp	Pro	Glu	Asn	Leu	Pro	
				140					145					150	
Glu	Ile	Ser	Ser	Gln	Lys	Thr	Gln	Arg	His	Ile	Gln	Arg	Gly	Pro	
				155					160					165	
Pro	His	Leu	Gln	Ile	Arg	Pro	Pro	Ser	Gln	Asp	Leu	Lys	Asp	Gly	
				170					175					180	
Thr	Gln	Glu	Glu	Ala	Thr	Lys	Arg	Gln	Glu	Ala	Pro	Val	Asp	Pro	
				185					190					195	
Arg	Pro	Glu	Gly	Asp	Pro	Gln	Arg	Thr	Val	Ile	Ser	Trp	Arg	Gly	
				200					205					210	
Ala	Val	Ile	Glu	Pro	Glu	Gln	Gly	Thr	Glu	Leu	Pro	Ser	Arg	Arg	
				215					220					225	
Ala	Glu	Val	Pro	Thr	Lys	Pro	Pro	Leu	Pro	Pro	Ala	Arg	Thr	Gln	
				230					235					240	
Gly	Thr	Pro	Val	His	Leu	Asn	Tyr	Arg	Gln	Lys	Gly	Val	Ile	Asp	
				245					250					255	

Val	Phe	Leu	His	Ala	Trp	Lys	Gly	Tyr	Arg	Lys	Phe	Ala	Trp	Gly		260	265	270
His	Asp	Glu	Leu	Lys	Pro	Val	Ser	Arg	Ser	Phe	Ser	Glu	Trp	Phe		275	280	285
Gly	Leu	Gly	Leu	Thr	Leu	Ile	Asp	Ala	Leu	Asp	Thr	Met	Trp	Ile		290	295	300
Leu	Gly	Leu	Arg	Lys	Glu	Phe	Glu	Glu	Ala	Arg	Lys	Trp	Val	Ser		305	310	315
Lys	Lys	Leu	His	Phe	Glu	Lys	Asp	Val	Asp	Val	Asn	Leu	Phe	Glu		320	325	330
Ser	Thr	Ile	Arg	Ile	Leu	Gly	Gly	Leu	Leu	Ser	Ala	Tyr	His	Leu		335	340	345
Ser	Gly	Asp	Ser	Leu	Phe	Leu	Arg	Lys	Ala	Glu	Asp	Phe	Gly	Asn		350	355	360
Arg	Leu	Met	Pro	Ala	Phe	Arg	Thr	Pro	Ser	Lys	Ile	Pro	Tyr	Ser		365	370	375
Asp	Val	Asn	Ile	Gly	Thr	Gly	Val	Ala	His	Pro	Pro	Arg	Trp	Thr		380	385	390
Ser	Asp	Ser	Thr	Val	Ala	Glu	Val	Thr	Ser	Ile	Gln	Leu	Glu	Phe		395	400	405
Arg	Glu	Leu	Ser	Arg	Leu	Thr	Gly	Asp	Lys	Lys	Phe	Gln	Glu	Ala		410	415	420
Val	Glu	Lys	Val	Thr	Gln	His	Ile	His	Gly	Leu	Ser	Gly	Lys	Lys		425	430	435
Asp	Gly	Leu	Val	Pro	Met	Phe	Ile	Asn	Thr	His	Ser	Gly	Leu	Phe		440	445	450
Thr	His	Leu	Gly	Val	Phe	Thr	Leu	Gly	Ala	Arg	Ala	Asp	Ser	Tyr		455	460	465
Tyr	Glu	Tyr	Leu	Leu	Lys	Gln	Trp	Ile	Gln	Gly	Gly	Lys	Gln	Glu		470	475	480
Thr	Gln	Leu	Leu	Glu	Asp	Tyr	Val	Glu	Ala	Ile	Glu	Gly	Val	Arg		485	490	495
Thr	His	Leu	Leu	Arg	His	Ser	Glu	Pro	Ser	Lys	Leu	Thr	Phe	Val		500	505	510
Gly	Glu	Leu	Ala	His	Gly	Arg	Phe	Ser	Ala	Lys	Met	Asp	His	Leu		515	520	525
Val	Cys	Phe	Leu	Pro	Gly	Thr	Leu	Ala	Leu	Gly	Val	Tyr	His	Gly		530	535	540
Leu	Pro	Ala	Ser	His	Met	Glu	Leu	Ala	Gln	Glu	Leu	Met	Glu	Thr				

	545		550		555
Cys Tyr Gln Met	Asn Arg Gln Met Glu Thr Gly Leu Ser Pro Glu				
	560		565		570
Ile Val His Phe	Asn Leu Tyr Pro Gln Pro Gly Arg Arg Asp Val				
	575		580		585
Glu Val Lys Pro	Ala Asp Arg His Asn Leu Leu Arg Pro Glu Thr				
	590		595		600
Val Glu Ser Leu	Phe Tyr Leu Tyr Arg Val Thr Gly Asp Arg Lys				
	605		610		615
Tyr Gln Asp Trp	Gly Trp Glu Ile Leu Gln Ser Phe Ser Arg Phe				
	620		625		630
Thr Arg Val Pro	Ser Gly Gly Tyr Ser Ser Ile Asn Asn Val Gln				
	635		640		645
Asp Pro Gln Lys	Pro Glu Pro Arg Asp Lys Met Glu Ser Phe Phe				
	650		655		660
Leu Gly Glu Thr	Leu Lys Tyr Leu Phe Leu Leu Phe Ser Asp Asp				
	665		670		675
Pro Asn Leu Leu	Ser Leu Asp Ala Tyr Val Phe Asn Thr Glu Ala				
	680		685		690
His Pro Leu Pro	Ile Trp Thr Pro Ala				
	695				

<210> 139
 <211> 870
 <212> DNA
 <213> Homo Sapien

<400> 139
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 ggaaccttcc atttatattct tcaagcaact tacagctgca ccgacagttg 150
 cgatgaaagt tctaattctct tccctcctcc tgttgctgcc actaatgctg 200
 atgtccatgg tctctagcag cctgaatcca ggggtcgcca gaggccacag 250
 ggaccgagggc caggcttcta ggagatggct ccaggaaggc ggccaagaat 300
 gtgagtgcaa agattgggtc ctgagagccc cgagaagaaa attcatgaca 350
 gtgtctgggc tgccaaagaa gcagtgcccc tgtgatcatt tcaagggcaa 400
 tgtgaagaaa acaagacacc aaaggcacca cagaaagcca aacaagcatt 450
 ccagagcctg ccagcaatct ctcaaacaat gtcagctaag aagctttgct 500

ctgcctttgt aggagctctg agcgcccact cttccaatta aacattctca 550
 gccagaaga cagtgcac acctaccaga cactcttctt ctccacctc 600
 actctccac tgtaccacc cctaaatcat tccagtgtc tcaaaaagca 650
 tgtttttcaa gatcattttg tttgttgctc tctctagtgt cttcttctct 700
 cgtcagtctt agcctgtgcc ctccccttac ccaggcttag gcttaattac 750
 ctgaaagatt ccaggaaact gtagcttcct agctagtgtc atttaacctt 800
 aaatgcaatc aggaaagtag caaacagaag tcaataaata tttttaaatg 850
 tcaaaaaaaaa aaaaaaaaaa 870

<210> 140
 <211> 119
 <212> PRT
 <213> Homo Sapien

<400> 140
 Met Lys Val Leu Ile Ser Ser Leu Leu Leu Leu Leu Pro Leu Met
 1 5 10 15
 Leu Met Ser Met Val Ser Ser Ser Leu Asn Pro Gly Val Ala Arg
 20 25 30
 Gly His Arg Asp Arg Gly Gln Ala Ser Arg Arg Trp Leu Gln Glu
 35 40 45
 Gly Gly Gln Glu Cys Glu Cys Lys Asp Trp Phe Leu Arg Ala Pro
 50 55 60
 Arg Arg Lys Phe Met Thr Val Ser Gly Leu Pro Lys Lys Gln Cys
 65 70 75
 Pro Cys Asp His Phe Lys Gly Asn Val Lys Lys Thr Arg His Gln
 80 85 90
 Arg His His Arg Lys Pro Asn Lys His Ser Arg Ala Cys Gln Gln
 95 100 105
 Phe Leu Lys Gln Cys Gln Leu Arg Ser Phe Ala Leu Pro Leu
 110 115

<210> 141
 <211> 551
 <212> DNA
 <213> Homo Sapien

<400> 141
 aatggctgtc ttagtacttc gcctgacagt tgtcctggga ctgcttgtct 50
 tattcctgac ctgctatgca gacgacaaac cagacaagcc agacgacaag 100
 ccagacgact cgggcaaaga cccaaagcca gacttcccca aattcctaag 150

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cctcctgggc acagagatca ttgagaatgc agtcgagttc atcctccgct 200
ccatgtccag gagcacagga tttatggaat ttgatgataa tgaaggaaaa 250
cattcatcaa agtgacatcc tcaggacaca cccatgtggc tcctggacaa 300
tccaagagca gccaaatcct gcttttccag tttggctcca caagtccctc 350
aggacagagc cctcaaagca actcccaacg agttctcagg attcaggctc 400
tggcttcaac caaacagaac tcattttgaa caccctgact gcatttttgc 450
ttttagaaag ttagaataaa tatggcgctt tgggatcaca tagttgatgg 500
agaggaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 550

a 551

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<210> 142
<211> 87
<212> PRT
<213> Homo Sapien

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<400> 142
Met Ala Val Leu Val Leu Arg Leu Thr Val Val Leu Gly Leu Leu
  1              5              10              15

Val Leu Phe Leu Thr Cys Tyr Ala Asp Asp Lys Pro Asp Lys Pro
      20              25              30

Asp Asp Lys Pro Asp Asp Ser Gly Lys Asp Pro Lys Pro Asp Phe
      35              40              45

Pro Lys Phe Leu Ser Leu Leu Gly Thr Glu Ile Ile Glu Asn Ala
      50              55              60

Val Glu Phe Ile Leu Arg Ser Met Ser Arg Ser Thr Gly Phe Met
      65              70              75

Glu Phe Asp Asp Asn Glu Gly Lys His Ser Ser Lys
      80              85

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<210> 143
<211> 1371
<212> DNA
<213> Homo Sapien

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<400> 143
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ggaagcacag ctgagagctg gtctgccatg gacatcctgg tcccactcct 100
gcagctgctg gtgctgcttc ttaccctgcc cctgcacctc atggctctgc 150
tgggctgctg gcagcccctg tgcaaaagct acttccccta cctgatggcc 200
gtgctgactc ccaagagcaa ccgcaagatg gagagcaaga aacgggagct 250

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aatgactgga aagaagaact gatatggcta gttcagctag ctggtacaga 1550
 taattcaaaa ctgctgttgg ttttaatttt gtaacctgtg gcctgatctg 1600
 taaataaaaac ttacattttt c 1621

<210> 146
 <211> 371
 <212> PRT
 <213> Homo Sapien

<400> 146
 Met Ser Phe Arg Lys Val Asn Ile Ile Ile Leu Val Leu Ala Val
 1 5 10 15
 Ala Leu Phe Leu Leu Val Leu His His Asn Phe Leu Ser Leu Ser
 20 25 30
 Ser Leu Leu Arg Asn Glu Val Thr Asp Ser Gly Ile Val Gly Pro
 35 40 45
 Gln Pro Ile Asp Phe Val Pro Asn Ala Leu Arg His Ala Val Asp
 50 55 60
 Gly Arg Gln Glu Glu Ile Pro Val Val Ile Ala Ala Ser Glu Asp
 65 70 75
 Arg Leu Gly Gly Ala Ile Ala Ala Ile Asn Ser Ile Gln His Asn
 80 85 90
 Thr Arg Ser Asn Val Ile Phe Tyr Ile Val Thr Leu Asn Asn Thr
 95 100 105
 Ala Asp His Leu Arg Ser Trp Leu Asn Ser Asp Ser Leu Lys Ser
 110 115 120
 Ile Arg Tyr Lys Ile Val Asn Phe Asp Pro Lys Leu Leu Glu Gly
 125 130 135
 Lys Val Lys Glu Asp Pro Asp Gln Gly Glu Ser Met Lys Pro Leu
 140 145 150
 Thr Phe Ala Arg Phe Tyr Leu Pro Ile Leu Val Pro Ser Ala Lys
 155 160 165
 Lys Ala Ile Tyr Met Asp Asp Asp Val Ile Val Gln Gly Asp Ile
 170 175 180
 Leu Ala Leu Tyr Asn Thr Ala Leu Lys Pro Gly His Ala Ala Ala
 185 190 195
 Phe Ser Glu Asp Cys Asp Ser Ala Ser Thr Lys Val Val Ile Arg
 200 205 210
 Gly Ala Gly Asn Gln Tyr Asn Tyr Ile Gly Tyr Leu Asp Tyr Lys
 215 220 225
 Lys Glu Arg Ile Arg Lys Leu Ser Met Lys Ala Ser Thr Cys Ser

230	235	240
Phe Asn Pro Gly Val Phe Val Ala Asn Leu Thr Glu Trp Lys Arg		
245	250	255
Gln Asn Ile Thr Asn Gln Leu Glu Lys Trp Met Lys Leu Asn Val		
260	265	270
Glu Glu Gly Leu Tyr Ser Arg Thr Leu Ala Gly Ser Ile Thr Thr		
275	280	285
Pro Pro Leu Leu Ile Val Phe Tyr Gln Gln His Ser Thr Ile Asp		
290	295	300
Pro Met Trp Asn Val Arg His Leu Gly Ser Ser Ala Gly Lys Arg		
305	310	315
Tyr Ser Pro Gln Phe Val Lys Ala Ala Lys Leu Leu His Trp Asn		
320	325	330
Gly His Leu Lys Pro Trp Gly Arg Thr Ala Ser Tyr Thr Asp Val		
335	340	345
Trp Glu Lys Trp Tyr Ile Pro Asp Pro Thr Gly Lys Phe Asn Leu		
350	355	360
Ile Arg Arg Tyr Thr Glu Ile Ser Asn Ile Lys		
365	370	

<210> 147
 <211> 1660
 <212> DNA
 <213> Homo Sapien

<400> 147
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 ccaggtctac cagttcctcc aagcaagtca tttcccttat ttaaccgatg 100
 tgtccctcaa acacctgagt gctactccct atttgcattct gttttgataa 150
 atgatgttga caccctccac cgaattctaa gtggaatcat gtcgggaaga 200
 gatacaatcc ttggcctgtg taccctcgca ttagccttgt ctttggccat 250
 gatgtttacc ttcagattca tcaccaccct tctgggttcac attttcattt 300
 cattgggttat ttggggattg ttgtttgtct gcggtgtttt atggtggctg 350
 tattatgact ataccaacga cctcagcata gaattggaca cagaaaggga 400
 aaatatgaag tgcgtgctgg gggttgctat cgtatccaca ggcattcacgg 450
 cagtgtgtgt cgtcttgatt ttgtttctca gaaagagaat aaaattgaca 500
 gttgagcttt tccaaatcac aaataaagcc atcagcagtg ctcccttctt 550
 gctgttccag ccaactgtgga catttgccat cctcattttt ttctgggtcc 600

Phe	Val	Cys	Gly	Val	Leu	Trp	Trp	Leu	Tyr	Tyr	Asp	Tyr	Thr	Asn
				50					55					60
Asp	Leu	Ser	Ile	Glu	Leu	Asp	Thr	Glu	Arg	Glu	Asn	Met	Lys	Cys
				65					70					75
Val	Leu	Gly	Phe	Ala	Ile	Val	Ser	Thr	Gly	Ile	Thr	Ala	Val	Leu
				80					85					90
Leu	Val	Leu	Ile	Phe	Val	Leu	Arg	Lys	Arg	Ile	Lys	Leu	Thr	Val
				95					100					105
Glu	Leu	Phe	Gln	Ile	Thr	Asn	Lys	Ala	Ile	Ser	Ser	Ala	Pro	Phe
				110					115					120
Leu	Leu	Phe	Gln	Pro	Leu	Trp	Thr	Phe	Ala	Ile	Leu	Ile	Phe	Phe
				125					130					135
Trp	Val	Leu	Trp	Val	Ala	Val	Leu	Leu	Ser	Leu	Gly	Thr	Ala	Gly
				140					145					150
Ala	Ala	Gln	Val	Met	Glu	Gly	Gly	Gln	Val	Glu	Tyr	Lys	Pro	Leu
				155					160					165
Ser	Gly	Ile	Arg	Tyr	Met	Trp	Ser	Tyr	His	Leu	Ile	Gly	Leu	Ile
				170					175					180
Trp	Thr	Ser	Glu	Phe	Ile	Leu	Ala	Cys	Gln	Gln	Met	Thr	Ile	Ala
				185					190					195
Gly	Ala	Val	Val	Thr	Cys	Tyr	Phe	Asn	Arg	Ser	Lys	Asn	Asp	Pro
				200					205					210
Pro	Asp	His	Pro	Ile	Leu	Ser	Ser	Leu	Ser	Ile	Leu	Phe	Phe	Tyr
				215					220					225
His	Gln	Gly	Thr	Val	Val	Lys	Gly	Ser	Phe	Leu	Ile	Ser	Val	Val
				230					235					240
Arg	Ile	Pro	Arg	Ile	Ile	Val	Met	Tyr	Met	Gln	Asn	Ala	Leu	Lys
				245					250					255
Glu	Gln	Gln	His	Gly	Ala	Leu	Ser	Arg	Tyr	Leu	Phe	Arg	Cys	Cys
				260					265					270
Tyr	Cys	Cys	Phe	Trp	Cys	Leu	Asp	Lys	Tyr	Leu	Leu	His	Leu	Asn
				275					280					285
Gln	Asn	Ala	Tyr	Thr	Thr	Thr	Ala	Ile	Asn	Gly	Thr	Asp	Phe	Cys
				290					295					300
Thr	Ser	Ala	Lys	Asp	Ala	Phe	Lys	Ile	Leu	Ser	Lys	Asn	Ser	Ser
				305					310					315
His	Phe	Thr	Ser	Ile	Asn	Cys	Phe	Gly	Asp	Phe	Ile	Ile	Phe	Leu
				320					325					330
Gly	Lys	Val	Leu	Val	Val	Cys	Phe	Thr	Val	Phe	Gly	Gly	Leu	Met

335	340	345
Ala Phe Asn Tyr Asn Arg Ala Phe Gln Val Trp Ala Val Pro Leu		
350	355	360
Leu Leu Val Ala Phe Phe Ala Tyr Leu Val Ala His Ser Phe Leu		
365	370	375
Ser Val Phe Glu Thr Val Leu Asp Ala Leu Phe Leu Cys Phe Ala		
380	385	390
Val Asp Leu Glu Thr Asn Asp Gly Ser Ser Glu Lys Pro Tyr Phe		
395	400	405
Met Asp Gln Glu Phe Leu Ser Phe Val Lys Arg Ser Asn Lys Leu		
410	415	420
Asn Asn Ala Arg Ala Gln Gln Asp Lys His Ser Leu Arg Asn Glu		
425	430	435
Glu Gly Thr Glu Leu Gln Ala Ile Val Arg		
440	445	

<210> 149
 <211> 2773
 <212> DNA
 <213> Homo Sapien

<400> 149
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<210> 150
 <211> 678
 <212> PRT
 <213> Homo Sapien

<400> 150
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 Ala Lys Lys Ile Lys Arg Pro Lys Phe Thr Val Pro Gln Ile Asn
 35 40 45
 Cys Asp Val Lys Ala Gly Lys Ile Ile Asp Pro Glu Phe Ile Val
 50 55 60
 Lys Cys Pro Ala Gly Cys Gln Asp Pro Lys Tyr His Val Tyr Gly
 65 70 75
 Thr Asp Val Tyr Ala Ser Tyr Ser Ser Val Cys Gly Ala Ala Val
 80 85 90
 His Ser Gly Val Leu Asp Asn Ser Gly Gly Lys Ile Leu Val Arg
 95 100 105
 Lys Val Ala Gly Gln Ser Gly Tyr Lys Gly Ser Tyr Ser Asn Gly
 110 115 120
 Val Gln Ser Leu Ser Leu Pro Arg Trp Arg Glu Ser Phe Ile Val
 125 130 135
 Leu Glu Ser Lys Pro Lys Lys Gly Val Thr Tyr Pro Ser Ala Leu

Thr Tyr Ser Ser	140	Ala Gln Ala Gly Glu Thr	150
Ser Lys Ser Pro	155	Ala Gln Ala Gly Glu Thr	165
Thr Lys Ala Tyr	170	Pro Gly Thr Thr Ala Gln	180
Gln Arg Pro Pro	175	Pro Gly Thr Thr Ala Gln	180
Pro Val Thr Leu	185	Val Thr Val Ala Val Ala	195
Met Gln Leu Leu	190	Val Thr Val Ala Val Ala	195
Thr Pro Thr Thr	200	Pro Ser Ala Ala Ser Thr	210
Leu Pro Arg Pro	205	Pro Ser Ala Ala Ser Thr	210
Thr Ser Ile Pro	215	Gly His Arg Ser Gln Glu	225
Arg Pro Gln Ser	220	Gly His Arg Ser Gln Glu	225
Met Asp Leu Trp	230	Thr Ser Ser Gln Asn Arg	240
Ser Thr Ala Thr	235	Thr Ser Ser Gln Asn Arg	240
Pro Arg Ala Asp	245	Gln Asp Pro Ser Gly Ala	255
Pro Gly Ile Gln	250	Gln Asp Pro Ser Gly Ala	255
Ala Phe Gln Lys	260	Val Ser Leu Gly Leu Val	270
Pro Val Gly Ala	265	Val Ser Leu Gly Leu Val	270
Pro Lys Glu Glu	275	Leu Glu Pro Val Ser Leu	285
Leu Ser Thr Gln	280	Leu Glu Pro Val Ser Leu	285
Gly Asp Pro Asn	290	Ser Phe Leu Ile Asp Gly	300
Cys Lys Ile Asp	295	Ser Phe Leu Ile Asp Gly	300
Ser Thr Ser Ile	305	Arg Ile Gln Lys Gln Leu	315
Gly Lys Arg Arg	310	Arg Ile Gln Lys Gln Leu	315
Leu Ala Asp Val	320	Ile Gly Pro Ala Gly Pro	330
Ala Gln Ala Leu	325	Ile Gly Pro Ala Gly Pro	330
Leu Met Gly Val	335	Asn Pro Ala Thr His Phe	345
Val Gln Tyr Gly	340	Asn Pro Ala Thr His Phe	345
Asn Leu Lys Thr	350	Asp Leu Lys Thr Ala Ile	360
His Thr Asn Ser	355	Asp Leu Lys Thr Ala Ile	360
Glu Lys Ile Thr	365	Ser Asn Val Gly Arg Ala	375
Gln Arg Gly Gly	370	Ser Asn Val Gly Arg Ala	375
Ile Ser Phe Val	380	Ser Lys Ala Asn Gly Asn	390
Thr Lys Asn Phe	385	Ser Lys Ala Asn Gly Asn	390
Arg Ser Gly Ala	395	Val Met Val Asp Gly Trp	405
Pro Asn Val Val	400	Val Met Val Asp Gly Trp	405
Pro Thr Asp Lys	410	Arg Leu Ala Arg Glu Ser	420
Val Glu Glu Ala	415	Arg Leu Ala Arg Glu Ser	420
Gly Ile Asn Ile	425	Glu Gly Ala Ala Glu Asn	435
Phe Phe Ile Thr	430	Glu Gly Ala Ala Glu Asn	435

Glu	Lys	Gln	Tyr	Val	Val	Glu	Pro	Asn	Phe	Ala	Asn	Lys	Ala	Val
				440					445					450
Cys	Arg	Thr	Asn	Gly	Phe	Tyr	Ser	Leu	His	Val	Gln	Ser	Trp	Phe
				455					460					465
Gly	Leu	His	Lys	Thr	Leu	Gln	Pro	Leu	Val	Lys	Arg	Val	Cys	Asp
				470					475					480
Thr	Asp	Arg	Leu	Ala	Cys	Ser	Lys	Thr	Cys	Leu	Asn	Ser	Ala	Asp
				485					490					495
Ile	Gly	Phe	Val	Ile	Asp	Gly	Ser	Ser	Ser	Val	Gly	Thr	Gly	Asn
				500					505					510
Phe	Arg	Thr	Val	Leu	Gln	Phe	Val	Thr	Asn	Leu	Thr	Lys	Glu	Phe
				515					520					525
Glu	Ile	Ser	Asp	Thr	Asp	Thr	Arg	Ile	Gly	Ala	Val	Gln	Tyr	Thr
				530					535					540
Tyr	Glu	Gln	Arg	Leu	Glu	Phe	Gly	Phe	Asp	Lys	Tyr	Ser	Ser	Lys
				545					550					555
Pro	Asp	Ile	Leu	Asn	Ala	Ile	Lys	Arg	Val	Gly	Tyr	Trp	Ser	Gly
				560					565					570
Gly	Thr	Ser	Thr	Gly	Ala	Ala	Ile	Asn	Phe	Ala	Leu	Glu	Gln	Leu
				575					580					585
Phe	Lys	Lys	Ser	Lys	Pro	Asn	Lys	Arg	Lys	Leu	Met	Ile	Leu	Ile
				590					595					600
Thr	Asp	Gly	Arg	Ser	Tyr	Asp	Asp	Val	Arg	Ile	Pro	Ala	Met	Ala
				605					610					615
Ala	His	Leu	Lys	Gly	Val	Ile	Thr	Tyr	Ala	Ile	Gly	Val	Ala	Trp
				620					625					630
Ala	Ala	Gln	Glu	Glu	Leu	Glu	Val	Ile	Ala	Thr	His	Pro	Ala	Arg
				635					640					645
Asp	His	Ser	Phe	Phe	Val	Asp	Glu	Phe	Asp	Asn	Leu	His	Gln	Tyr
				650					655					660
Val	Pro	Arg	Ile	Ile	Gln	Asn	Ile	Cys	Thr	Glu	Phe	Asn	Ser	Gln
				665					670					675

Pro Arg Asn

<210> 151

<211> 1759

<212> DNA

<213> Homo Sapien

<400> 151

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<210> 152
 <211> 541
 <212> PRT
 <213> Homo Sapien

<400> 152
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 Leu Pro Gln His His Gly Ala Pro Gly Pro Asp Gly Ser Ala Pro
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 Asp Pro Ala His Tyr Ser Phe Ser Leu Thr Leu Ile Asp Ala Leu
 35 40 45
 Asp Thr Leu Leu Ile Leu Gly Asn Val Ser Glu Phe Gln Arg Val
 50 55 60
 Val Glu Val Leu Gln Asp Ser Val Asp Phe Asp Ile Asp Val Asn
 65 70 75
 Ala Ser Val Phe Glu Thr Asn Ile Arg Val Val Gly Gly Leu Leu
 80 85 90
 Ser Ala His Leu Leu Ser Lys Lys Ala Gly Val Glu Val Glu Ala
 95 100 105
 Gly Trp Pro Cys Ser Gly Pro Leu Leu Arg Met Ala Glu Glu Ala
 110 115 120
 Ala Arg Lys Leu Leu Pro Ala Phe Gln Thr Pro Thr Gly Met Pro
 125 130 135
 Tyr Gly Thr Val Asn Leu Leu His Gly Val Asn Pro Gly Glu Thr
 140 145 150
 Pro Val Thr Cys Thr Ala Gly Ile Gly Thr Phe Ile Val Glu Phe
 155 160 165
 Ala Thr Leu Ser Ser Leu Thr Gly Asp Pro Val Phe Glu Asp Val
 170 175 180
 Ala Arg Val Ala Leu Met Arg Leu Trp Glu Ser Arg Ser Asp Ile
 185 190 195
 Gly Leu Val Gly Asn His Ile Asp Val Leu Thr Gly Lys Trp Val

Ala Gln Asp Ala Gly Ile Gly Ala Gly Val Asp Ser Tyr Phe Glu	215	220	225
Tyr Leu Val Lys Gly Ala Ile Leu Leu Gln Asp Lys Lys Leu Met	230	235	240
Ala Met Phe Leu Glu Tyr Asn Lys Ala Ile Arg Asn Tyr Thr Arg	245	250	255
Phe Asp Asp Trp Tyr Leu Trp Val Gln Met Tyr Lys Gly Thr Val	260	265	270
Ser Met Pro Val Phe Gln Ser Leu Glu Ala Tyr Trp Pro Gly Leu	275	280	285
Gln Ser Leu Ile Gly Asp Ile Asp Asn Ala Met Arg Thr Phe Leu	290	295	300
Asn Tyr Tyr Thr Val Trp Lys Gln Phe Gly Gly Leu Pro Glu Phe	305	310	315
Tyr Asn Ile Pro Gln Gly Tyr Thr Val Glu Lys Arg Glu Gly Tyr	320	325	330
Pro Leu Arg Pro Glu Leu Ile Glu Ser Ala Met Tyr Leu Tyr Arg	335	340	345
Ala Thr Gly Asp Pro Thr Leu Leu Glu Leu Gly Arg Asp Ala Val	350	355	360
Glu Ser Ile Glu Lys Ile Ser Lys Val Glu Cys Gly Phe Ala Thr	365	370	375
Ile Lys Asp Leu Arg Asp His Lys Leu Asp Asn Arg Met Glu Ser	380	385	390
Phe Phe Leu Ala Glu Thr Val Lys Tyr Leu Tyr Leu Leu Phe Asp	395	400	405
Pro Thr Asn Phe Ile His Asn Asn Gly Ser Thr Phe Asp Ala Val	410	415	420
Ile Thr Pro Tyr Gly Glu Cys Ile Leu Gly Ala Gly Gly Tyr Ile	425	430	435
Phe Asn Thr Glu Ala His Pro Ile Asp Leu Ala Ala Leu His Cys	440	445	450
Cys Gln Arg Leu Lys Glu Glu Gln Trp Glu Val Glu Asp Leu Met	455	460	465
Arg Glu Phe Tyr Ser Leu Lys Arg Ser Arg Ser Lys Phe Gln Lys	470	475	480
Asn Thr Val Ser Ser Gly Pro Trp Glu Pro Pro Ala Arg Pro Gly	485	490	495

Thr Leu Phe Ser Pro Glu Asn His Asp Gln Ala Arg Glu Arg Lys
500 505 510

Pro Ala Lys Gln Lys Val Pro Leu Leu Ser Cys Pro Ser Gln Pro
515 520 525

Phe Thr Ser Lys Leu Ala Leu Leu Gly Gln Val Phe Leu Asp Ser
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Ser

<210> 153

<211> 1486

<212> DNA

<213> Homo Sapien

<400> 153

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<210> 154
 <211> 124
 <212> PRT
 <213> Homo Sapien

<400> 154
 Met Glu Leu Pro Phe Val Thr His Leu Phe Leu Pro Leu Val Phe
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 Leu Thr Gly Leu Cys Ser Pro Phe Asn Leu Asp Glu His His Pro
 20 25 30
 Arg Leu Phe Pro Gly Pro Pro Glu Ala Glu Phe Gly Tyr Ser Val
 35 40 45
 Leu Gln His Val Gly Gly Gly Gln Arg Trp Met Leu Val Gly Ala
 50 55 60
 Pro Trp Asp Gly Pro Ser Gly Asp Arg Arg Gly Asp Val Tyr Arg
 65 70 75
 Cys Pro Val Gly Gly Ala His Asn Ala Pro Cys Ala Lys Gly His
 80 85 90
 Leu Gly Asp Tyr Gln Leu Gly Asn Ser Ser His Pro Ala Val Asn
 95 100 105
 Met His Leu Gly Met Ser Leu Leu Glu Thr Asp Gly Asp Gly Gly
 110 115 120
 Phe Met Val Ser

<210> 155
 <211> 2530
 <212> DNA
 <213> Homo Sapien

<400> 155

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 gtctcacttt gttgccaggt ctggagttca gtgccatgat catggtttac 200
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<210> 156

<211> 413

<212> PRT

<213> Homo Sapien

<400> 156

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Thr	Leu	Ile	Asp	Gly	Ser	Glu	Met	Glu	Trp	Asp	Phe	Met	Trp	His
			20						25					30
Leu	Arg	Lys	Val	Pro	Arg	Ile	Val	Ser	Glu	Arg	Thr	Phe	His	Leu
			35						40					45

Thr	Ser	Pro	Ala	Phe	Glu	Ala	Asp	Ala	Lys	Met	Met	Val	Asn	Thr	
				50					55					60	
Val	Cys	Gly	Ile	Glu	Cys	Gln	Lys	Glu	Leu	Pro	Thr	Pro	Ser	Leu	
				65					70					75	
Ser	Glu	Leu	Glu	Asp	Tyr	Leu	Ser	Tyr	Glu	Thr	Val	Phe	Glu	Asn	
				80					85					90	
Gly	Thr	Arg	Thr	Leu	Thr	Arg	Val	Lys	Val	Gln	Asp	Leu	Val	Leu	
				95					100					105	
Glu	Pro	Thr	Gln	Asn	Ile	Thr	Thr	Lys	Gly	Val	Ser	Val	Arg	Arg	
				110					115					120	
Lys	Arg	Gln	Val	Tyr	Gly	Thr	Asp	Ser	Arg	Phe	Ser	Ile	Leu	Asp	
				125					130					135	
Lys	Arg	Phe	Leu	Thr	Asn	Phe	Pro	Phe	Ser	Thr	Ala	Val	Lys	Leu	
				140					145					150	
Ser	Thr	Gly	Cys	Ser	Gly	Ile	Leu	Ile	Ser	Pro	Gln	His	Val	Leu	
				155					160					165	
Thr	Ala	Ala	His	Cys	Val	His	Asp	Gly	Lys	Asp	Tyr	Val	Lys	Gly	
				170					175					180	
Ser	Lys	Lys	Leu	Arg	Val	Gly	Leu	Leu	Lys	Met	Arg	Asn	Lys	Ser	
				185					190					195	
Gly	Gly	Lys	Lys	Arg	Arg	Gly	Ser	Lys	Arg	Ser	Arg	Arg	Glu	Ala	
				200					205					210	
Ser	Gly	Gly	Asp	Gln	Arg	Glu	Gly	Thr	Arg	Glu	His	Leu	Gln	Glu	
				215					220					225	
Arg	Ala	Lys	Gly	Gly	Arg	Arg	Arg	Lys	Lys	Ser	Gly	Arg	Gly	Gln	
				230					235					240	
Arg	Ile	Ala	Glu	Gly	Arg	Pro	Ser	Phe	Gln	Trp	Thr	Arg	Val	Lys	
				245					250					255	
Asn	Thr	His	Ile	Pro	Lys	Gly	Trp	Ala	Arg	Gly	Gly	Met	Gly	Asp	
				260					265					270	
Ala	Thr	Leu	Asp	Tyr	Asp	Tyr	Ala	Leu	Leu	Glu	Leu	Lys	Arg	Ala	
				275					280					285	
His	Lys	Lys	Lys	Tyr	Met	Glu	Leu	Gly	Ile	Ser	Pro	Thr	Ile	Lys	
				290					295					300	
Lys	Met	Pro	Gly	Gly	Met	Ile	His	Phe	Ser	Gly	Phe	Asp	Asn	Asp	
				305					310					315	
Arg	Ala	Asp	Gln	Leu	Val	Tyr	Arg	Phe	Cys	Ser	Val	Ser	Asp	Glu	
				320					325					330	
Ser	Asn	Asp	Leu	Leu	Tyr	Gln	Tyr	Cys	Asp	Ala	Glu	Ser	Gly	Ser	

Thr Gly Ser Gly Val Tyr Leu Arg Leu Lys Asp Pro Asp Lys Lys	335	340	345
	350	355	360
Asn Trp Lys Arg Lys Ile Ile Ala Val Tyr Ser Gly His Gln Trp	365	370	375
Val Asp Val His Gly Val Gln Lys Asp Tyr Asn Val Ala Val Arg	380	385	390
Ile Thr Pro Leu Lys Tyr Ala Gln Ile Cys Leu Trp Ile His Gly	395	400	405
Asn Asp Ala Asn Cys Ala Tyr Gly	410		

<210> 157
 <211> 2883
 <212> DNA
 <213> Homo Sapien

<400> 157
 gggacccatg cggccgtgac ccccggtcc ctagaggccc agcgcagccg 50
 cagcggacaa aggagcatgt ccgcgccggg gaaggcccg cctccggccg 100
 ccataaggct ccggtcgccg ctggggccgc gccgcgctcc tgcccgcccg 150
 ggctccgggg cggcccgtta ggccagtgcg ccgcgcgctcg ccccgcaggc 200
 cccggcccg agcatggagc caccgggacg ccggcggggc cgcgcgagc 250
 cgccgctggt gctgccgctc tcgctgttag cgctgctcg gctgctggga 300
 gggggcgccg gggcgggcg cgcgcgctg cccgccggct gcaagcacga 350
 tggggcgccc cgaggggctg gcagggcggc gggcgccgcc gagggcaagg 400
 tgggtgtgag cagcctggaa ctgcgcagg tcctgcccc agatactctg 450
 cccaaccgca cggtcaccct gattctgagt aacaataaga tatccgagct 500
 gaagaatggc tcattttctg ggttaagtct ccttgaaaga ttggacctcc 550
 gaaacaatct tattagtagt atagatccag gtgccttctg gggactgtca 600
 tctctaaaaa gattggatct gacaaacaat cgaataggat gtctgaatgc 650
 agacatatct cgaggactca ccaatctggt tcggctaaac ctttcgggga 700
 atttggtttt tcattatct caaggaactt ttgattatct tgcgtcatta 750
 cggctcttgg aattocagac tgagtatctt ttgtgtgact gtaacatact 800
 gtggatgcat cgctgggtaa aggagaagaa catcacggtg cgggatacca 850
 ggtgtgttta tcctaagtca ctgcaggccc aaccagtcac aggcgtgaag 900

caggagctgt tgacatgca cctccgctt gaattgccgt ctttctacat 950
 gactccatct catcgccaag ttgtgtttga aggagacagc cttcctttcc 1000
 agtgcacggc ttcataatatt gatcaggaca tgcaagtgtt gtggatcag 1050
 gatgggagaa tagttgaaac cgatgaatcg caaggatatt ttgttgaaaa 1100
 gaacatgatt cacaactgct ccttgattgc aagtgccta accatttcta 1150
 atattcaggc tggatctact ggaaattggg gctgtcatgt ccagaccaa 1200
 cgtgggaata atacaggagc tgtggatatt gtggatattag agagttctgc 1250
 acagtactgt cctccagaga ggggtgtaaa caacaaaggc gacttcagat 1300
 ggcccagaac attggcaggc attactgcat atctgcagtg tacgcggaac 1350
 acccatggca gtgggatata tcccggaaac ccacaggatg agagaaaagc 1400
 ttggcgcaga tgtgatagag gtggcttttg ggcagatgat gattattctc 1450
 gctgtcagta tgcaaatgat gtcactagag ttctttatat gtttaatcag 1500
 atgcccctca atcttaccaa tgccgtggca acagctcgac agttactggc 1550
 ttacactgtg gaagcagcca acttttctga caaaatggat gttatatttg 1600
 tggcagaaat gattgaaaaa tttggaagat ttaccaagga ggaaaaatca 1650
 aaagagctag gtgacgtgat ggttgacatt gcaagtaaca tcatgttggc 1700
 tgatgaacgt gtcctgtggc tggcgcagag ggaagctaaa gcctgcagta 1750
 ggattgtgca gtgtcttcag cgcattgcta cctaccggct agccggtgga 1800
 gctcacgttt attcaacata ttcaccaat attgctctgg aagcttatgt 1850
 catcaagtct actggcttca cggggatgac ctgtaccgtg ttccagaaag 1900
 tggcagcctc tgatcgta ca ggactttcgg attatgggag gcgggatcca 1950
 gagggaaacc tggataagca gctgagcttt aagtgcaatg tttcaaatac 2000
 attttcgagt ctggcactaa aggtatgtta cattctgcaa tcatttaaga 2050
 ctatttacag ttaaattaga atgctccaaa tgttctgctt cgcaaaaataa 2100
 ccttattaaa agattttttt ttgcaggaag ataggtatta ttgcttttgc 2150
 tactgtttta aagaaaacta accaggaaga actgcattac gactttcaag 2200
 ggccctaggc atttttgcct ttgattccct ttcttcacat aaaaatatca 2250
 gaaattacat tttataactg cagtgggata aatgcaaata tactattgtt 2300
 acatgtgaaa aaattttatt tgacttaaaa gtttatttat ttgttttttt 2350

gctcctgatt ttaagacaat aagatgtttt catgggcccc taaaagtatc 2400
atgagccttt ggcaactgcgc ctgccaaagcc tagtggagaa gtcaaccctg 2450
agaccaggtg tttaatcaag caagctgtat atcaaaattht ttggcagaaa 2500
acacaaatat gtcatatatc tttttttaaa aaaagtattht cattgaagca 2550
agcaaaatga aagcatttht actgatttht aaaattggtg ctttagatat 2600
atttgactac actgtattga agcaaataga ggaggcacaa ctccagcacc 2650
ctaattggaac cacatttht tcaattagct ttctgtgggc atgtgtaatt 2700
gtattctctg cggtttttaa tctcacagta ctttatttct gtcttgcccc 2750
tcaataatat cacaaacaat attccagtca ttttaattggc tgcataataa 2800
ctgatccaac aggtgttagg tgttctggtt tagtgtgagc actcaataaa 2850
tattgaatga atgaacgaaa aaaaaaaaaa aaa 2883

<210> 158
<211> 616
<212> PRT
<213> Homo Sapien

<400> 158
Met Glu Pro Pro Gly Arg Arg Arg Gly Arg Ala Gln Pro Pro Leu
1 5 10 15
Leu Leu Pro Leu Ser Leu Leu Ala Leu Leu Ala Leu Leu Gly Gly
20 25 30
Gly Gly Gly Gly Gly Ala Ala Ala Leu Pro Ala Gly Cys Lys His
35 40 45
Asp Gly Arg Pro Arg Gly Ala Gly Arg Ala Ala Gly Ala Ala Glu
50 55 60
Gly Lys Val Val Cys Ser Ser Leu Glu Leu Ala Gln Val Leu Pro
65 70 75
Pro Asp Thr Leu Pro Asn Arg Thr Val Thr Leu Ile Leu Ser Asn
80 85 90
Asn Lys Ile Ser Glu Leu Lys Asn Gly Ser Phe Ser Gly Leu Ser
95 100 105
Leu Leu Glu Arg Leu Asp Leu Arg Asn Asn Leu Ile Ser Ser Ile
110 115 120
Asp Pro Gly Ala Phe Trp Gly Leu Ser Ser Leu Lys Arg Leu Asp
125 130 135
Leu Thr Asn Asn Arg Ile Gly Cys Leu Asn Ala Asp Ile Phe Arg
140 145 150

Gly	Leu	Thr	Asn	Leu	Val	Arg	Leu	Asn	Leu	Ser	Gly	Asn	Leu	Phe	155	160	165
Ser	Ser	Leu	Ser	Gln	Gly	Thr	Phe	Asp	Tyr	Leu	Ala	Ser	Leu	Arg	170	175	180
Ser	Leu	Glu	Phe	Gln	Thr	Glu	Tyr	Leu	Leu	Cys	Asp	Cys	Asn	Ile	185	190	195
Leu	Trp	Met	His	Arg	Trp	Val	Lys	Glu	Lys	Asn	Ile	Thr	Val	Arg	200	205	210
Asp	Thr	Arg	Cys	Val	Tyr	Pro	Lys	Ser	Leu	Gln	Ala	Gln	Pro	Val	215	220	225
Thr	Gly	Val	Lys	Gln	Glu	Leu	Leu	Thr	Cys	Asp	Pro	Pro	Leu	Glu	230	235	240
Leu	Pro	Ser	Phe	Tyr	Met	Thr	Pro	Ser	His	Arg	Gln	Val	Val	Phe	245	250	255
Glu	Gly	Asp	Ser	Leu	Pro	Phe	Gln	Cys	Met	Ala	Ser	Tyr	Ile	Asp	260	265	270
Gln	Asp	Met	Gln	Val	Leu	Trp	Tyr	Gln	Asp	Gly	Arg	Ile	Val	Glu	275	280	285
Thr	Asp	Glu	Ser	Gln	Gly	Ile	Phe	Val	Glu	Lys	Asn	Met	Ile	His	290	295	300
Asn	Cys	Ser	Leu	Ile	Ala	Ser	Ala	Leu	Thr	Ile	Ser	Asn	Ile	Gln	305	310	315
Ala	Gly	Ser	Thr	Gly	Asn	Trp	Gly	Cys	His	Val	Gln	Thr	Lys	Arg	320	325	330
Gly	Asn	Asn	Thr	Arg	Thr	Val	Asp	Ile	Val	Val	Leu	Glu	Ser	Ser	335	340	345
Ala	Gln	Tyr	Cys	Pro	Pro	Glu	Arg	Val	Val	Asn	Asn	Lys	Gly	Asp	350	355	360
Phe	Arg	Trp	Pro	Arg	Thr	Leu	Ala	Gly	Ile	Thr	Ala	Tyr	Leu	Gln	365	370	375
Cys	Thr	Arg	Asn	Thr	His	Gly	Ser	Gly	Ile	Tyr	Pro	Gly	Asn	Pro	380	385	390
Gln	Asp	Glu	Arg	Lys	Ala	Trp	Arg	Arg	Cys	Asp	Arg	Gly	Gly	Phe	395	400	405
Trp	Ala	Asp	Asp	Asp	Tyr	Ser	Arg	Cys	Gln	Tyr	Ala	Asn	Asp	Val	410	415	420
Thr	Arg	Val	Leu	Tyr	Met	Phe	Asn	Gln	Met	Pro	Leu	Asn	Leu	Thr	425	430	435
Asn	Ala	Val	Ala	Thr	Ala	Arg	Gln	Leu	Leu	Ala	Tyr	Thr	Val	Glu			

440	445	450
Ala Ala Asn Phe Ser Asp Lys Met Asp Val Ile Phe Val Ala Glu		
455	460	465
Met Ile Glu Lys Phe Gly Arg Phe Thr Lys Glu Glu Lys Ser Lys		
470	475	480
Glu Leu Gly Asp Val Met Val Asp Ile Ala Ser Asn Ile Met Leu		
485	490	495
Ala Asp Glu Arg Val Leu Trp Leu Ala Gln Arg Glu Ala Lys Ala		
500	505	510
Cys Ser Arg Ile Val Gln Cys Leu Gln Arg Ile Ala Thr Tyr Arg		
515	520	525
Leu Ala Gly Gly Ala His Val Tyr Ser Thr Tyr Ser Pro Asn Ile		
530	535	540
Ala Leu Glu Ala Tyr Val Ile Lys Ser Thr Gly Phe Thr Gly Met		
545	550	555
Thr Cys Thr Val Phe Gln Lys Val Ala Ala Ser Asp Arg Thr Gly		
560	565	570
Leu Ser Asp Tyr Gly Arg Arg Asp Pro Glu Gly Asn Leu Asp Lys		
575	580	585
Gln Leu Ser Phe Lys Cys Asn Val Ser Asn Thr Phe Ser Ser Leu		
590	595	600
Ala Leu Lys Val Cys Tyr Ile Leu Gln Ser Phe Lys Thr Ile Tyr		
605	610	615
Ser		

<210> 159
 <211> 1917
 <212> DNA
 <213> Homo Sapien

<400> 159
 ggggaatctg cagtaggtct gccggcgatg gagtgggtggg ctagctcgcc 50
 gcttcggctc tggtgctgt tgttcctcct gccctcagcg cagggccgcc 100
 agaaggagtc aggttcaaaa tggaaagtat ttattgacca aattaacag 150
 tctttggaga attacgaacc atgttcaagt caaaactgca gctgctacca 200
 tgggtgtcata gaagaggatc taactccttt ccgaggaggc atctccagga 250
 agatgatggc agaggtagtc agacggaagc tagggacca ctatcagatc 300
 actaagaaca gactgtaccg ggaaaatgac tgcattgtcc cctcaagggtg 350

tagtgggtgtt gagcacttta ttttggaagt gatcgggCGT ctccctgaca 400
 tggagatggg gatcaatgta cgagattatc ctcaggttcc taaatggatg 450
 gagcctgccA tcccagtctt ctcttctcagt aagacatcag agtaccatga 500
 tatcatgtat cctgcttgga catttttgga agggggacct gctgtttggc 550
 caatttatcc tacaggtctt ggacgggtggg acctcttcag agaagatctg 600
 gtaaggtcag cagcacagtg gccatggaaa aagaaaaact ctacagcata 650
 tttccgagga tcaaggacaa gtccagaacg agatcctctc attcttctgt 700
 ctcggaaaaa cccaaaactt gttgatgcag aatacaccaa aaaccaggcc 750
 tggaaatcta tgaaagatac cttaggaaaag ccagctgcta aggatgtcca 800
 tcttgtggat cactgcaaA acaagtatct gtttaatttt cgaggcgtag 850
 ctgcaagttt cgggtttaaa cacctcttcc tgtgtggctc acttgttttc 900
 catgtttggg atgagtggct agaattcttc tatccacagc tgaagccatg 950
 ggttcactat atcccagtca aaacagatct ctccaatgtc caagagctgt 1000
 tacaatttgt aaaagcaaA gatgatgtag ctcaagagat tgctgaaagg 1050
 ggaagccagt ttattaggaa ccatttgCag atggatgaca tcacctgtta 1100
 ctgggagAAC ctcttgagtg aatactctaa attcctgtct tataatgtaa 1150
 cgagaaggaa aggttatgat caaattattc ccaaaatgtt gaaaactgaa 1200
 ctatagtagt catcatagga ccatagtcct ctttgtggca acagatctca 1250
 gatatcctac ggtgagaagc ttaccataag cttggctcct ataccttgaa 1300
 tatctgctat caagccaaA acctggtttt ccttatcatg ctgcaccCag 1350
 agcaactctt gagaaagatt taaaatgtgt ctaatacact gatatgaagc 1400
 agttcaactt tttggatgaa taaggaccag aaatcgtgag atgtggattt 1450
 tgaacccaac tctacctttc attttcttaa gaccaatcac agcttgtgcc 1500
 tcagatcatc cacctgtgtg agtccatcac tgtgaaattg actgtgtcca 1550
 tgtgatgatg ccctttgtcc cattattttg agcagaaaat tcgtcatttg 1600
 gaagtagtac aactcattgc tggaattgtg aaattattca aggcgtgatc 1650
 tctgtcaact tattttaatg taggaaaccC tatgggggtt atgaaaaata 1700
 cttggggatc attctctgaa tggctaaagg aagcggtagc catgccatgc 1750
 aatgatgtag gagttctctt ttgtaaaacc ataaactctg ttactcagga 1800

ggtttctata atgccacata gaaagaggcc aattgcatga gtaattattg 1850
 caattggatt tcaggttccc tttttgtgcc ttcatgccct acttcttaat 1900
 gcctctctaa agccaaa 1917

<210> 160
 <211> 392
 <212> PRT
 <213> Homo Sapien

<400> 160
 Met Glu Trp Trp Ala Ser Ser Pro Leu Arg Leu Trp Leu Leu Leu
 1 5 10 15
 Phe Leu Leu Pro Ser Ala Gln Gly Arg Gln Lys Glu Ser Gly Ser
 20 25 30
 Lys Trp Lys Val Phe Ile Asp Gln Ile Asn Arg Ser Leu Glu Asn
 35 40 45
 Tyr Glu Pro Cys Ser Ser Gln Asn Cys Ser Cys Tyr His Gly Val
 50 55 60
 Ile Glu Glu Asp Leu Thr Pro Phe Arg Gly Gly Ile Ser Arg Lys
 65 70 75
 Met Met Ala Glu Val Val Arg Arg Lys Leu Gly Thr His Tyr Gln
 80 85 90
 Ile Thr Lys Asn Arg Leu Tyr Arg Glu Asn Asp Cys Met Phe Pro
 95 100 105
 Ser Arg Cys Ser Gly Val Glu His Phe Ile Leu Glu Val Ile Gly
 110 115 120
 Arg Leu Pro Asp Met Glu Met Val Ile Asn Val Arg Asp Tyr Pro
 125 130 135
 Gln Val Pro Lys Trp Met Glu Pro Ala Ile Pro Val Phe Ser Phe
 140 145 150
 Ser Lys Thr Ser Glu Tyr His Asp Ile Met Tyr Pro Ala Trp Thr
 155 160 165
 Phe Trp Glu Gly Gly Pro Ala Val Trp Pro Ile Tyr Pro Thr Gly
 170 175 180
 Leu Gly Arg Trp Asp Leu Phe Arg Glu Asp Leu Val Arg Ser Ala
 185 190 195
 Ala Gln Trp Pro Trp Lys Lys Lys Asn Ser Thr Ala Tyr Phe Arg
 200 205 210
 Gly Ser Arg Thr Ser Pro Glu Arg Asp Pro Leu Ile Leu Leu Ser
 215 220 225
 Arg Lys Asn Pro Lys Leu Val Asp Ala Glu Tyr Thr Lys Asn Gln

230	235	240
Ala Trp Lys Ser Met Lys Asp Thr Leu Gly Lys Pro Ala Ala Lys		
245	250	255
Asp Val His Leu Val Asp His Cys Lys Tyr Lys Tyr Leu Phe Asn		
260	265	270
Phe Arg Gly Val Ala Ala Ser Phe Arg Phe Lys His Leu Phe Leu		
275	280	285
Cys Gly Ser Leu Val Phe His Val Gly Asp Glu Trp Leu Glu Phe		
290	295	300
Phe Tyr Pro Gln Leu Lys Pro Trp Val His Tyr Ile Pro Val Lys		
305	310	315
Thr Asp Leu Ser Asn Val Gln Glu Leu Leu Gln Phe Val Lys Ala		
320	325	330
Asn Asp Asp Val Ala Gln Glu Ile Ala Glu Arg Gly Ser Gln Phe		
335	340	345
Ile Arg Asn His Leu Gln Met Asp Asp Ile Thr Cys Tyr Trp Glu		
350	355	360
Asn Leu Leu Ser Glu Tyr Ser Lys Phe Leu Ser Tyr Asn Val Thr		
365	370	375
Arg Arg Lys Gly Tyr Asp Gln Ile Ile Pro Lys Met Leu Lys Thr		
380	385	390
Glu Leu		

<210> 161
 <211> 2095
 <212> DNA
 <213> Homo Sapien

<400> 161
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 agctatcaag gaagaaattg ccaaaccatg tctttttttc tgttttcaga 100
 gtagttcaca acagatctga gtgttttaaat taagcatgga atacagaaaa 150
 caacaaaaaa cttaagcttt aatttcattc ggaattccac agttttctta 200
 gctccctgga cccggttgac ctgttggtctc ttcccgtcgg ctgctctatc 250
 acgtggtgct ctccgactac tcaccccgag tgtaaagaac cttcggctcg 300
 cgtgcttctg agctgctgtg gatggcctcg gctctctgga ctgtccttcc 350
 gagtaggatg tcaactgagat ccctcaaag gagcctcctg ctgctgtcac 400
 tcttgagttt ctttgtgatg tggtacctca gccttcccca ctacaatgtg 450

atagaacgcg	tgaactggat	gtacttctat	gagtatgagc	cgattttacag	500
acaagacttt	cacttcacac	ttcgagagca	ttcaaactgc	tctcatcaaa	550
atccattttct	ggtcattctg	gtgacctccc	acccttcaga	tgtgaaagcc	600
aggcaggcca	ttagagttac	ttggggtgaa	aaaaagtctt	ggtggggata	650
tgaggttctt	acatttttct	tattaggcca	agaggctgaa	aaggaagaca	700
aaatgttggc	attgtcctta	gaggatgaac	accttcttta	tggtgacata	750
atccgacaag	atttttttaga	cacatataat	aacctgacct	tgaaaacccat	800
tatggcattc	aggtgggtaa	ctgagttttg	ccccaatgcc	aagtacgtaa	850
tgaagacaga	cactgatgtt	ttcatcaata	ctggcaattt	agtgaagtat	900
cttttaaacc	taaaccactc	agagaagttt	ttcacagggt	atcctctaata	950
tgataattat	tcctatagag	gattttacca	aaaaacccat	atttcttacc	1000
aggagtatcc	tttcaagggtg	ttccctccat	actgcagtgg	gttggggttat	1050
ataatgtcca	gagatttggt	gccaaaggatc	tatgaaatga	tgggtcacgt	1100
aaaacccttc	aagtttgaag	atgtttatgt	cgggatctgt	ttgaatttat	1150
taaaagtga	cattcatatt	ccagaagaca	caaatctttt	ctttctatat	1200
agaatccatt	tggatgtctg	tcaactgaga	cgtgtgattg	cagcccatgg	1250
cttttcttcc	aaggagatca	tcactttttg	gcaggctcatg	ctaaggaaca	1300
ccacatgcca	ttattaactt	cacattctac	aaaaagccta	gaaggacagg	1350
ataccttggtg	gaaagtgtta	aataaagtag	gtactgtgga	aaattcatgg	1400
ggaggtcagt	gtgctggctt	acactgaact	gaaactcatg	aaaaaccag	1450
actggagact	ggaggggttac	acttgtgatt	tattagtcag	gcccttcaaa	1500
gatgatatgt	ggaggaatta	aatataaagg	aattggagggt	ttttgctaaa	1550
gaaattaata	ggaccaaaca	atttggacat	gtcattctgt	agactagaat	1600
ttcttaaaaag	ggtgttactg	agttataagc	tcactaggct	gtaaaaacaa	1650
aacaatgtag	agttttat	attgaacaat	gtagtcactt	gaaggttttg	1700
tgtatatctt	atgtggatta	ccaatttaaa	aatatatgta	gttctgtgtc	1750
aaaaaacttc	ttcactgaag	ttatactgaa	caaaatttta	cctgtttttg	1800
gtcatttata	aagtacttca	agatgttgca	gtatttcaca	gttattatta	1850
tttaaaatta	cttcaacttt	gtgttttttaa	atgttttgac	gatttcaata	1900

caagataaaa aggatagtgga atcattctttt acatgcaaac attttccagt 1950
tacttaactg atcagtttat tattgataca tcactccatt aatgtaaagt 2000
cataggtcac tattgcatat cagtaatctc ttggactttg ttaaataattt 2050
tactgtggta atatagagaa gaattaaagc aagaaaatct gaaaa 2095

<210> 162
<211> 331
<212> PRT
<213> Homo Sapien

<400> 162

Met	Ala	Ser	Ala	Leu	Trp	Thr	Val	Leu	Pro	Ser	Arg	Met	Ser	Leu	1	5	10	15
Arg	Ser	Leu	Lys	Trp	Ser	Leu	Leu	Leu	Leu	Ser	Leu	Leu	Ser	Phe	20	25	30	
Phe	Val	Met	Trp	Tyr	Leu	Ser	Leu	Pro	His	Tyr	Asn	Val	Ile	Glu	35	40	45	
Arg	Val	Asn	Trp	Met	Tyr	Phe	Tyr	Glu	Tyr	Glu	Pro	Ile	Tyr	Arg	50	55	60	
Gln	Asp	Phe	His	Phe	Thr	Leu	Arg	Glu	His	Ser	Asn	Cys	Ser	His	65	70	75	
Gln	Asn	Pro	Phe	Leu	Val	Ile	Leu	Val	Thr	Ser	His	Pro	Ser	Asp	80	85	90	
Val	Lys	Ala	Arg	Gln	Ala	Ile	Arg	Val	Thr	Trp	Gly	Glu	Lys	Lys	95	100	105	
Ser	Trp	Trp	Gly	Tyr	Glu	Val	Leu	Thr	Phe	Phe	Leu	Leu	Gly	Gln	110	115	120	
Glu	Ala	Glu	Lys	Glu	Asp	Lys	Met	Leu	Ala	Leu	Ser	Leu	Glu	Asp	125	130	135	
Glu	His	Leu	Leu	Tyr	Gly	Asp	Ile	Ile	Arg	Gln	Asp	Phe	Leu	Asp	140	145	150	
Thr	Tyr	Asn	Asn	Leu	Thr	Leu	Lys	Thr	Ile	Met	Ala	Phe	Arg	Trp	155	160	165	
Val	Thr	Glu	Phe	Cys	Pro	Asn	Ala	Lys	Tyr	Val	Met	Lys	Thr	Asp	170	175	180	
Thr	Asp	Val	Phe	Ile	Asn	Thr	Gly	Asn	Leu	Val	Lys	Tyr	Leu	Leu	185	190	195	
Asn	Leu	Asn	His	Ser	Glu	Lys	Phe	Phe	Thr	Gly	Tyr	Pro	Leu	Ile	200	205	210	
Asp	Asn	Tyr	Ser	Tyr	Arg	Gly	Phe	Tyr	Gln	Lys	Thr	His	Ile	Ser	215	220	225	

Tyr	Gln	Glu	Tyr	Pro	Phe	Lys	Val	Phe	Pro	Pro	Tyr	Cys	Ser	Gly
				230					235					240
Leu	Gly	Tyr	Ile	Met	Ser	Arg	Asp	Leu	Val	Pro	Arg	Ile	Tyr	Glu
				245					250					255
Met	Met	Gly	His	Val	Lys	Pro	Ile	Lys	Phe	Glu	Asp	Val	Tyr	Val
				260					265					270
Gly	Ile	Cys	Leu	Asn	Leu	Leu	Lys	Val	Asn	Ile	His	Ile	Pro	Glu
				275					280					285
Asp	Thr	Asn	Leu	Phe	Phe	Leu	Tyr	Arg	Ile	His	Leu	Asp	Val	Cys
				290					295					300
Gln	Leu	Arg	Arg	Val	Ile	Ala	Ala	His	Gly	Phe	Ser	Ser	Lys	Glu
				305					310					315
Ile	Ile	Thr	Phe	Trp	Gln	Val	Met	Leu	Arg	Asn	Thr	Thr	Cys	His
				320					325					330

Tyr

<210> 163
 <211> 1706
 <212> DNA
 <213> Homo Sapien

<400> 163
 catttctgaa actaatcgtg tcagaattga ctttgaaaag cattgctttt 50
 tacagaagta tattaacttt ttaggagtaa tttctagttt ggattgtaat 100
 atgaaataat ttaaaagggc ttcgctcata tataggaaaa tcgcatatgg 150
 tcctagtatt aaattcttat tgcttactga tttttttgag ttaagagttg 200
 ttatatgcta gaatatgagg atgtgaatat aaataagaga agaaaaaaga 250
 ataaagtaga ttgagtctcc aattttatgt aagcttcaga agaactgggt 300
 tgtttacatg caagcttata gttgaaatat ttttcaggaa ttacatgaat 350
 gacagtcttc gaaccaatgt gtttgttcga tttcaaccag agactatagc 400
 atgtgcttgc atctaccttg cagctagagc acttcagatt ccgttgccaa 450
 ctcgccccca ttggtttctt ctttttggtg ctacagaaga ggaaatccag 500
 gaaatctgca tagaaacact taggctttat accagaaaaa agccaaacta 550
 tgaattactg gaaaaagaag tagaaaaaag aaaagtagcc ttacaagaag 600
 ccaaattaaa agcaaaggga ttgaatccgg atggaactcc agccctttca 650
 accctgggtg gattttctcc agcctccaag ccatcatcac caagagaagt 700

Leu Tyr Thr Arg Lys Lys Pro Asn Tyr Glu Leu Leu Glu Lys Glu	50	55	60
	65	70	75
Val Glu Lys Arg Lys Val Ala Leu Gln Glu Ala Lys Leu Lys Ala	80	85	90
Lys Gly Leu Asn Pro Asp Gly Thr Pro Ala Leu Ser Thr Leu Gly	95	100	105
Gly Phe Ser Pro Ala Ser Lys Pro Ser Ser Pro Arg Glu Val Lys	110	115	120
Ala Glu Glu Lys Ser Pro Ile Ser Ile Asn Val Lys Thr Val Lys	125	130	135
Lys Glu Pro Glu Asp Arg Gln Gln Ala Ser Lys Ser Pro Tyr Asn	140	145	150
Gly Val Arg Lys Asp Ser Lys Arg Ser Arg Asn Ser Arg Ser Ala	155	160	165
Ser Arg Ser Arg Ser Arg Thr Arg Ser Arg Ser Arg Ser His Thr	170	175	180
Pro Arg Arg His Tyr Asn Asn Arg Arg Ser Arg Ser Gly Thr Tyr	185	190	195
Ser Ser Arg Ser Arg Ser Arg Ser Arg Ser His Ser Glu Ser Pro	200	205	210
Arg Arg His His Asn His Gly Ser Pro His Leu Lys Ala Lys His	215	220	225
Thr Arg Asp Asp Leu Lys Ser Ser Asn Arg His Gly His Lys Arg	230	235	240
Lys Lys Ser Arg Ser Arg Ser Gln Ser Lys Ser Arg Asp His Ser	245	250	255
Asp Ala Ala Lys Lys His Arg His Glu Arg Gly His His Arg Asp	260	265	270
Arg Arg Glu Arg Ser Arg Ser Phe Glu Arg Ser His Lys Ser Lys	275	280	285
His His Gly Gly Ser Arg Ser Gly His Gly Arg His Arg Arg	290	295	

<210> 165
 <211> 2571
 <212> DNA
 <213> Homo Sapien

<400> 165
 gggttcctaca tcctctcatc tgagaatcag agagcataat cttctttacgg 50

gcccgatgatt tattaacgtg gcttaatctg aagggttctca gtcaaattct 100
 ttgtgatcta ctgattgtgg gggcatggca aggttttgctt aaaggagctt 150
 ggctgggttg ggccttgta gctgacagaa ggtggccagg gagaatgcag 200
 cacactgctc ggagaatgaa ggcgcttctg ttgctgggtc tgccttggtc 250
 cagtcctgct aactacattg acaatgtggg caacctgcac ttcctgtatt 300
 cagaactctg taaaggtgcc tcccactacg gcctgaccaa agataggaag 350
 aggcgctcac aagatggctg tccagacggc tgtgcgagcc tcacagccac 400
 ggctccctcc ccagagggtt ctgcagctgc caccatctcc ttaatgacag 450
 acgagcctgg cctagacaac cctgcctacg tgcctcggc agaggacggg 500
 cagccagcaa tcagcccagt ggactctggc cggagcaacc gaactagggc 550
 acggcccttt gagagatcca ctattagaag cagatcattt aaaaaataa 600
 atcgagcttt gagtgttctt cgaaggacaa agagcgggag tgcagttgcc 650
 aaccatgccg accagggcag ggaaaattct gaaaacacca ctgcccctga 700
 agtctttcca aggttgtagc acctgattcc agatggtgaa attaccagca 750
 tcaagatcaa tcgagtagat cccagtgaag gcctctctat taggctgggtg 800
 ggaggtagcg aaacccact ggtccatctc attatccaac acatttatcg 850
 tgatgggggtg atcgccagag acggccggct actgccagga gacatcattc 900
 taaaggtcaa cgggatggac atcagcaatg tccctcacia ctacgctgtg 950
 cgtctcctgc ggcagccctg ccagggtgctg tggctgactg tgatgcgtga 1000
 acagaagtgc cgcagcagga acaatggaca ggccccggat gcctacagac 1050
 cccgagatga cagctttcat gtgattctca acaaaagtag ccccgaggag 1100
 cagcttgga taaaactggt gcgcaagggt gatgagcctg gggttttcat 1150
 cttcaatgtg ctggatggcg gtgtggcata tcgacatggt cagcttgagg 1200
 agaatgaccg tgtgttagcc atcaatggac atgatcttcg atatggcagc 1250
 ccgaaagtgc cggtcatct gattcaggcc agtgaaagac gtgttcacct 1300
 cgtcgtgtcc cgccagggtc ggcagcggag cctgacatc tttcaggaag 1350
 ccggctggaa cagcaatggc agctgggtccc cagggccagg ggagaggagc 1400
 aacactccca agcccccca tcctacaatt acttgtcatg agaaggtggg 1450
 aaatatccaa aaagaccccg gtgaatctct cggcatgacc gtcgcagggg 1500

Arg	Arg	Ser	Gln	Asp 50	Gly	Cys	Pro	Asp	Gly 55	Cys	Ala	Ser	Leu	Thr 60
Ala	Thr	Ala	Pro	Ser 65	Pro	Glu	Val	Ser	Ala 70	Ala	Ala	Thr	Ile	Ser 75
Leu	Met	Thr	Asp	Glu 80	Pro	Gly	Leu	Asp	Asn 85	Pro	Ala	Tyr	Val	Ser 90
Ser	Ala	Glu	Asp	Gly 95	Gln	Pro	Ala	Ile	Ser 100	Pro	Val	Asp	Ser	Gly 105
Arg	Ser	Asn	Arg	Thr 110	Arg	Ala	Arg	Pro	Phe 115	Glu	Arg	Ser	Thr	Ile 120
Arg	Ser	Arg	Ser	Phe 125	Lys	Lys	Ile	Asn	Arg 130	Ala	Leu	Ser	Val	Leu 135
Arg	Arg	Thr	Lys	Ser 140	Gly	Ser	Ala	Val	Ala 145	Asn	His	Ala	Asp	Gln 150
Gly	Arg	Glu	Asn	Ser 155	Glu	Asn	Thr	Thr	Ala 160	Pro	Glu	Val	Phe	Pro 165
Arg	Leu	Tyr	His	Leu 170	Ile	Pro	Asp	Gly	Glu 175	Ile	Thr	Ser	Ile	Lys 180
Ile	Asn	Arg	Val	Asp 185	Pro	Ser	Glu	Ser	Leu 190	Ser	Ile	Arg	Leu	Val 195
Gly	Gly	Ser	Glu	Thr 200	Pro	Leu	Val	His	Ile 205	Ile	Ile	Gln	His	Ile 210
Tyr	Arg	Asp	Gly	Val 215	Ile	Ala	Arg	Asp	Gly 220	Arg	Leu	Leu	Pro	Gly 225
Asp	Ile	Ile	Leu	Lys 230	Val	Asn	Gly	Met	Asp 235	Ile	Ser	Asn	Val	Pro 240
His	Asn	Tyr	Ala	Val 245	Arg	Leu	Leu	Arg	Gln 250	Pro	Cys	Gln	Val	Leu 255
Trp	Leu	Thr	Val	Met 260	Arg	Glu	Gln	Lys	Phe 265	Arg	Ser	Arg	Asn	Asn 270
Gly	Gln	Ala	Pro	Asp 275	Ala	Tyr	Arg	Pro	Arg 280	Asp	Asp	Ser	Phe	His 285
Val	Ile	Leu	Asn	Lys 290	Ser	Ser	Pro	Glu	Glu 295	Gln	Leu	Gly	Ile	Lys 300
Leu	Val	Arg	Lys	Val 305	Asp	Glu	Pro	Gly	Val 310	Phe	Ile	Phe	Asn	Val 315
Leu	Asp	Gly	Gly	Val 320	Ala	Tyr	Arg	His	Gly 325	Gln	Leu	Glu	Glu	Asn 330
Asp	Arg	Val	Leu	Ala	Ile	Asn	Gly	His	Asp	Leu	Arg	Tyr	Gly	Ser

Pro Glu Ser Ala	Ala His Leu Ile Gln	Ala Ser Glu Arg Arg	Val
350	355		360
His Leu Val Val	Ser Arg Gln Val Arg	Gln Arg Ser Pro Asp	Ile
365	370		375
Phe Gln Glu Ala	Gly Trp Asn Ser Asn	Gly Ser Trp Ser Pro	Gly
380	385		390
Pro Gly Glu Arg	Ser Asn Thr Pro Lys	Pro Leu His Pro Thr	Ile
395	400		405
Thr Cys His Glu	Lys Val Val Asn Ile	Gln Lys Asp Pro Gly	Glu
410	415		420
Ser Leu Gly Met	Thr Val Ala Gly Gly	Ala Ser His Arg Glu	Trp
425	430		435
Asp Leu Pro Ile	Tyr Val Ile Ser Val	Glu Pro Gly Gly Val	Ile
440	445		450
Ser Arg Asp Gly	Arg Ile Lys Thr Gly	Asp Ile Leu Leu Asn	Val
455	460		465
Asp Gly Val Glu	Leu Thr Glu Val Ser	Arg Ser Glu Ala Val	Ala
470	475		480
Leu Leu Lys Arg	Thr Ser Ser Ser Ile	Val Leu Lys Ala Leu	Glu
485	490		495
Val Lys Glu Tyr	Glu Pro Gln Glu Asp	Cys Ser Ser Pro Ala	Ala
500	505		510
Leu Asp Ser Asn	His Asn Met Ala Pro	Pro Ser Asp Trp Ser	Pro
515	520		525
Ser Trp Val Met	Trp Leu Glu Leu Pro	Arg Cys Leu Tyr Asn	Cys
530	535		540
Lys Asp Ile Val	Leu Arg Arg Asn Thr	Ala Gly Ser Leu Gly	Phe
545	550		555
Cys Ile Val Gly	Gly Tyr Glu Glu Tyr	Asn Gly Asn Lys Pro	Phe
560	565		570
Phe Ile Lys Ser	Ile Val Glu Gly Thr	Pro Ala Tyr Asn Asp	Gly
575	580		585
Arg Ile Arg Cys	Gly Asp Ile Leu Leu	Ala Val Asn Gly Arg	Ser
590	595		600
Thr Ser Gly Met	Ile His Ala Cys Leu	Ala Arg Leu Leu Lys	Glu
605	610		615
Leu Lys Gly Arg	Ile Thr Leu Thr Ile	Val Ser Trp Pro Gly	Thr
620	625		630

Phe Leu

<210> 167
<211> 735
<212> DNA
<213> Homo Sapien

<400> 167
gggaaagcca tttcgaaaac ccactatata ttttcatttc 50
tgctgctagc tgccttgggc ctcaaatatt tcattctgtt ttctgacttt 100
caagttatat accgtggaat ggagttgata ccaaccataa catcgtggag 150
ggttttaatt ttggtggtag ccctcaccga attctgggtg ggctttcttt 200
gcagaggatt ccacettcaa aatcatgaac tctggctgtt gatcaaaaga 250
gaatttggat tctactctaa aagtcaatat aggacttggc aaaagaagct 300
agcagaagac tcaacctggc ctcccataaa caggacagat tattcaggtg 350
atggcaaaaa tggattctac atcaacggag gctatgaaag ccatgaacag 400
attccaaaaa gaaaactcaa attgggaggg caaccacag aacagcattt 450
ctgggccagg ctgtaatcag aattgtcgtc gtacatgctc aacagcattg 500
cttttttccc caaaattaac acattgtgga gaagtgatga tactctcccc 550
ttacctttcc tctctccatt caagcattca aagtatatatt tcaatgaatt 600
aaaccttgca gcaagggacc ttagataggc ttattctgac tgtatgcttt 650
accaatgaga gaaaaaaatg catttcctgt atcatccttt tcaataaact 700
gtattcattt tgaaaaaaaa aaaaaaaaaa aaaaa 735

<210> 168
<211> 115
<212> PRT
<213> Homo Sapien

<400> 168
Met Glu Leu Ile Pro Thr Ile Thr Ser Trp Arg Val Leu Ile Leu
1 5 10 15
Val Val Ala Leu Thr Gln Phe Trp Cys Gly Phe Leu Cys Arg Gly
20 25 30
Phe His Leu Gln Asn His Glu Leu Trp Leu Leu Ile Lys Arg Glu
35 40 45
Phe Gly Phe Tyr Ser Lys Ser Gln Tyr Arg Thr Trp Gln Lys Lys
50 55 60
Leu Ala Glu Asp Ser Thr Trp Pro Pro Ile Asn Arg Thr Asp Tyr

	65		70		75
Ser Gly Asp Gly Lys Asn Gly Phe Tyr Ile Asn Gly Gly Tyr Glu					
	80		85		90
Ser His Glu Gln Ile Pro Lys Arg Lys Leu Lys Leu Gly Gly Gln					
	95		100		105
Pro Thr Glu Gln His Phe Trp Ala Arg Leu					
	110		115		

<210> 169

<211> 2846

<212> DNA

<213> Homo Sapien

<400> 169

cgctcgggca ccagccgcgg caaggatgga gctgggttgc tggacgcagt 50

tggggctcac ttttcttcag ctccttctca tctcgtcctt gccaaagagag 100

tacacagtca ttaatgaagc ctgccctgga gcagagtgga atatcatgtg 150

tcgggagtgct tgtgaatatg atcagattga gtgcgtctgc cccggaaaga 200

gggaagtcgt gggttatacc atcccttgct gcaggaatga ggagaatgag 250

tgtgactcct gcctgatcca cccaggttgt accatctttg aaaactgcaa 300

gagctgccga aatggctcat gggggggtac cttggatgac ttctatgtga 350

aggggttcta ctgtgcagag tgccgagcag gctggtacgg aggagactgc 400

atgcgatgtg gccaggttct gcgagcccca aagggtcaga ttttgttgga 450

aagctatccc cttaaagtctc actgtgaatg gaccattcat gctaaacctg 500

ggtttgtcat ccaactaaga tttgtcatgt tgagtctgga gtttgactac 550

atgtgccagt atgactatgt tgagggtcgt gatggagaca accgcgatgg 600

ccagatcatc aagcgtgtct gtggcaacga gcggccagct cctatccaga 650

gcataggatc ctcaactccac gtcctcttcc actccgatgg ctccaagaat 700

tttgacgggtt tccatgccat ttatgaggag atcacagcat gtcctcatc 750

cccttggtttc catgaaggca cgtgcgtcct tgacaaggct ggatcttaca 800

agtgtgcctg cttggcaggc tatactgggc agcgtgtga aaatctcctt 850

gaagaaagaa actgctcaga ccctgggggc ccagtcaatg ggtaccagaa 900

aataacaggg ggcctgggc ttatcaacgg acgcatgct aaaattggca 950

ccgtgggtgtc tttcttttgt aacaactcct atgttcttag tggcaatgag 1000

aaaagaactt gccagcagaa tggagagtgg tcagggaaac agcccatctg 1050

cataaaagcc tgccgagaac caaagatttc agacctggtg agaaggagag 1100
 ttcttccgat gcaggttcag tcaagggaga caccattaca ccagctatac 1150
 tcagcggcct tcagcaagca gaaactgcag agtgccccta ccaagaagcc 1200
 agcccttccc tttggagatc tgcccatggg ataccaacat ctgcataccc 1250
 agctccagta tgagtgcac tcaccttct accgccgcct gggcagcagc 1300
 aggaggacat gtctgaggac tgggaagtgg agtgggcggg caccatcctg 1350
 catccctatc tgcgggaaaa ttgagaacat cactgctcca aagacccaag 1400
 ggttgcgctg gccgtggcag gcagccatct acaggaggac cagcggggtg 1450
 catgacggca gcctacacaa gggagcgtgg ttcctagtct gcagcgggtg 1500
 cctggtgaat gagcgactg tgggtggtgg tgcccactgt gttactgacc 1550
 tggggaaggt caccatgatc aagacagcag acctgaaagt tgttttgggg 1600
 aaattctacc gggatgatga ccgggatgag aagaccatcc agagcctaca 1650
 gatttctgct atcattctgc atcccaacta tgaccccatc ctgcttgatg 1700
 ctgacatcgc catcctgaag ctctagaca aggcccgat cagcaccoga 1750
 gtccagccca tctgcctcgc tgccagtcgg gatctcagca cttccttcca 1800
 ggagtccac atcactgtgg ctggctggaa tgtcctggca gacgtgagga 1850
 gccctggctt caagaacgac aactgcgct ctggggtggt cagtgtggtg 1900
 gactcgtgc tgtgtgagga gcagcatgag gaccatggca tcccagtgag 1950
 tgtcactgat aacatgttct gtgccagctg ggaacccact gccccttctg 2000
 atatctgcac tgcagagaca ggaggcatcg cggctgtgtc cttcccgga 2050
 cgagcatctc ctgagccacg ctggcatctg atgggactgg tcagctggag 2100
 ctatgataaa acatgcagcc acaggctctc cactgccttc accaagggtg 2150
 tgccttttaa agactggatt gaaagaaata tgaaatgaac catgctcatg 2200
 cactccttga gaagtgttct tgtatatccg tctgtacgtg tgtcattgcg 2250
 tgaagcagtg tgggcctgaa gtgtgattg gcctgtgaac ttggctgtgc 2300
 cagggttct gacttcaggg acaaaactca gtgaagggtg agtagacctc 2350
 cattgctggt aggtgatgc cgcgtccact actaggacag ccaattggaa 2400
 gatgccaggg cttgcaagaa gtaagtttct tcaaagaaga ccatatacaa 2450
 aacctctcca ctccactgac ctggtggtct tccccaactt tcagttatac 2500

gaatgccatc agcttgacca gggaagatct gggcttcacg aggccccctt 2550
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 gagctgggat gtggtgcatg cctttgtgta catggccaca gtacagtctg 2650
 gtccttttcc ttccccatct cttgtacaca ttttaataaa ataagggttg 2700
 gcttctgaac tacaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2750
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2800
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa 2846

<210> 170
 <211> 720
 <212> PRT
 <213> Homo Sapien

<400> 170
 Met Glu Leu Gly Cys Trp Thr Gln Leu Gly Leu Thr Phe Leu Gln
 1 5 10 15
 Leu Leu Leu Ile Ser Ser Leu Pro Arg Glu Tyr Thr Val Ile Asn
 20 25 30
 Glu Ala Cys Pro Gly Ala Glu Trp Asn Ile Met Cys Arg Glu Cys
 35 40 45
 Cys Glu Tyr Asp Gln Ile Glu Cys Val Cys Pro Gly Lys Arg Glu
 50 55 60
 Val Val Gly Tyr Thr Ile Pro Cys Cys Arg Asn Glu Glu Asn Glu
 65 70 75
 Cys Asp Ser Cys Leu Ile His Pro Gly Cys Thr Ile Phe Glu Asn
 80 85 90
 Cys Lys Ser Cys Arg Asn Gly Ser Trp Gly Gly Thr Leu Asp Asp
 95 100 105
 Phe Tyr Val Lys Gly Phe Tyr Cys Ala Glu Cys Arg Ala Gly Trp
 110 115 120
 Tyr Gly Gly Asp Cys Met Arg Cys Gly Gln Val Leu Arg Ala Pro
 125 130 135
 Lys Gly Gln Ile Leu Leu Glu Ser Tyr Pro Leu Asn Ala His Cys
 140 145 150
 Glu Trp Thr Ile His Ala Lys Pro Gly Phe Val Ile Gln Leu Arg
 155 160 165
 Phe Val Met Leu Ser Leu Glu Phe Asp Tyr Met Cys Gln Tyr Asp
 170 175 180
 Tyr Val Glu Val Arg Asp Gly Asp Asn Arg Asp Gly Gln Ile Ile
 185 190 195

Lys	Arg	Val	Cys	Gly	Asn	Glu	Arg	Pro	Ala	Pro	Ile	Gln	Ser	Ile	200	205	210
Gly	Ser	Ser	Leu	His	Val	Leu	Phe	His	Ser	Asp	Gly	Ser	Lys	Asn	215	220	225
Phe	Asp	Gly	Phe	His	Ala	Ile	Tyr	Glu	Glu	Ile	Thr	Ala	Cys	Ser	230	235	240
Ser	Ser	Pro	Cys	Phe	His	Asp	Gly	Thr	Cys	Val	Leu	Asp	Lys	Ala	245	250	255
Gly	Ser	Tyr	Lys	Cys	Ala	Cys	Leu	Ala	Gly	Tyr	Thr	Gly	Gln	Arg	260	265	270
Cys	Glu	Asn	Leu	Leu	Glu	Glu	Arg	Asn	Cys	Ser	Asp	Pro	Gly	Gly	275	280	285
Pro	Val	Asn	Gly	Tyr	Gln	Lys	Ile	Thr	Gly	Gly	Pro	Gly	Leu	Ile	290	295	300
Asn	Gly	Arg	His	Ala	Lys	Ile	Gly	Thr	Val	Val	Ser	Phe	Phe	Cys	305	310	315
Asn	Asn	Ser	Tyr	Val	Leu	Ser	Gly	Asn	Glu	Lys	Arg	Thr	Cys	Gln	320	325	330
Gln	Asn	Gly	Glu	Trp	Ser	Gly	Lys	Gln	Pro	Ile	Cys	Ile	Lys	Ala	335	340	345
Cys	Arg	Glu	Pro	Lys	Ile	Ser	Asp	Leu	Val	Arg	Arg	Arg	Val	Leu	350	355	360
Pro	Met	Gln	Val	Gln	Ser	Arg	Glu	Thr	Pro	Leu	His	Gln	Leu	Tyr	365	370	375
Ser	Ala	Ala	Phe	Ser	Lys	Gln	Lys	Leu	Gln	Ser	Ala	Pro	Thr	Lys	380	385	390
Lys	Pro	Ala	Leu	Pro	Phe	Gly	Asp	Leu	Pro	Met	Gly	Tyr	Gln	His	395	400	405
Leu	His	Thr	Gln	Leu	Gln	Tyr	Glu	Cys	Ile	Ser	Pro	Phe	Tyr	Arg	410	415	420
Arg	Leu	Gly	Ser	Ser	Arg	Arg	Thr	Cys	Leu	Arg	Thr	Gly	Lys	Trp	425	430	435
Ser	Gly	Arg	Ala	Pro	Ser	Cys	Ile	Pro	Ile	Cys	Gly	Lys	Ile	Glu	440	445	450
Asn	Ile	Thr	Ala	Pro	Lys	Thr	Gln	Gly	Leu	Arg	Trp	Pro	Trp	Gln	455	460	465
Ala	Ala	Ile	Tyr	Arg	Arg	Thr	Ser	Gly	Val	His	Asp	Gly	Ser	Leu	470	475	480
His	Lys	Gly	Ala	Trp	Phe	Leu	Val	Cys	Ser	Gly	Ala	Leu	Val	Asn			

485										490				495		
Glu	Arg	Thr	Val	Val	Val	Ala	Ala	His	Cys	Val	Thr	Asp	Leu	Gly		
				500					505					510		
Lys	Val	Thr	Met	Ile	Lys	Thr	Ala	Asp	Leu	Lys	Val	Val	Leu	Gly		
				515					520					525		
Lys	Phe	Tyr	Arg	Asp	Asp	Asp	Arg	Asp	Glu	Lys	Thr	Ile	Gln	Ser		
				530					535					540		
Leu	Gln	Ile	Ser	Ala	Ile	Ile	Leu	His	Pro	Asn	Tyr	Asp	Pro	Ile		
				545					550					555		
Leu	Leu	Asp	Ala	Asp	Ile	Ala	Ile	Leu	Lys	Leu	Leu	Asp	Lys	Ala		
				560					565					570		
Arg	Ile	Ser	Thr	Arg	Val	Gln	Pro	Ile	Cys	Leu	Ala	Ala	Ser	Arg		
				575					580					585		
Asp	Leu	Ser	Thr	Ser	Phe	Gln	Glu	Ser	His	Ile	Thr	Val	Ala	Gly		
				590					595					600		
Trp	Asn	Val	Leu	Ala	Asp	Val	Arg	Ser	Pro	Gly	Phe	Lys	Asn	Asp		
				605					610					615		
Thr	Leu	Arg	Ser	Gly	Val	Val	Ser	Val	Val	Asp	Ser	Leu	Leu	Cys		
				620					625					630		
Glu	Glu	Gln	His	Glu	Asp	His	Gly	Ile	Pro	Val	Ser	Val	Thr	Asp		
				635					640					645		
Asn	Met	Phe	Cys	Ala	Ser	Trp	Glu	Pro	Thr	Ala	Pro	Ser	Asp	Ile		
				650					655					660		
Cys	Thr	Ala	Glu	Thr	Gly	Gly	Ile	Ala	Ala	Val	Ser	Phe	Pro	Gly		
				665					670					675		
Arg	Ala	Ser	Pro	Glu	Pro	Arg	Trp	His	Leu	Met	Gly	Leu	Val	Ser		
				680					685					690		
Trp	Ser	Tyr	Asp	Lys	Thr	Cys	Ser	His	Arg	Leu	Ser	Thr	Ala	Phe		
				695					700					705		
Thr	Lys	Val	Leu	Pro	Phe	Lys	Asp	Trp	Ile	Glu	Arg	Asn	Met	Lys		
				710					715					720		

<210> 171

<211> 2128

<212> DNA

<213> Homo Sapien

<400> 171

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<210> 174

<211> 335

<212> PRT

<213> Homo Sapien

<400> 174

Met	Phe	Leu	Ala	Thr	Leu	Ser	Phe	Leu	Leu	Pro	Phe	Ala	His	Pro	1	5	10	15
Phe	Gly	Thr	Val	Ser	Cys	Glu	Tyr	Met	Leu	Gly	Ser	Pro	Leu	Ser	20	25	30	
Ser	Leu	Ala	Gln	Val	Asn	Leu	Ser	Pro	Phe	Ser	His	Pro	Lys	Val	35	40	45	
His	Met	Asp	Pro	Asn	Tyr	Cys	His	Pro	Ser	Thr	Ser	Leu	His	Leu	50	55	60	
Cys	Ser	Leu	Ala	Trp	Ser	Phe	Thr	Arg	Leu	Leu	His	Pro	Pro	Leu	65	70	75	
Ser	Pro	Gly	Ile	Ser	Gln	Val	Val	Lys	Asp	His	Val	Thr	Lys	Pro	80	85	90	
Thr	Ala	Met	Ala	Gln	Gly	Arg	Val	Ala	His	Leu	Ile	Glu	Trp	Lys	95	100	105	
Gly	Trp	Ser	Lys	Pro	Ser	Asp	Ser	Pro	Ala	Ala	Leu	Glu	Ser	Ala	110	115	120	
Phe	Ser	Ser	Tyr	Ser	Asp	Leu	Ser	Glu	Gly	Glu	Gln	Glu	Ala	Arg	125	130	135	
Phe	Ala	Ala	Gly	Val	Ala	Glu	Gln	Phe	Ala	Ile	Ala	Glu	Ala	Lys	140	145	150	
Leu	Arg	Ala	Trp	Ser	Ser	Val	Asp	Gly	Glu	Asp	Ser	Thr	Asp	Asp	155	160	165	
Ser	Tyr	Asp	Glu	Asp	Phe	Ala	Gly	Gly	Met	Asp	Thr	Asp	Met	Ala	170	175	180	

Gly Gln Leu Pro Leu Gly Pro His Leu Gln Asp Leu Phe Thr Gly
185 190 195

His Arg Phe Ser Arg Pro Val Arg Gln Gly Ser Val Glu Pro Glu
200 205 210

Ser Asp Cys Ser Gln Thr Val Ser Pro Asp Thr Leu Cys Ser Ser
215 220 225

Leu Cys Ser Leu Glu Asp Gly Leu Leu Gly Ser Pro Ala Arg Leu
230 235 240

Ala Ser Gln Leu Leu Gly Asp Glu Leu Leu Leu Ala Lys Leu Pro
245 250 255

Pro Ser Arg Glu Ser Ala Phe Arg Ser Leu Gly Pro Leu Glu Ala
260 265 270

Gln Asp Ser Leu Tyr Asn Ser Pro Leu Thr Glu Ser Cys Leu Ser
275 280 285

Pro Ala Glu Glu Glu Pro Ala Pro Cys Lys Asp Cys Gln Pro Leu
290 295 300

Cys Pro Pro Leu Thr Gly Ser Trp Glu Arg Gln Arg Gln Ala Ser
305 310 315

Asp Leu Ala Ser Ser Gly Val Val Ser Leu Asp Glu Asp Glu Ala
320 325 330

Glu Pro Glu Glu Gln
335

<210> 175

<211> 2084

<212> DNA

<213> Homo Sapien

<400> 175

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ccatctgttt tctctaagtc acgacagatt cctttcagac aggacaactg 150

tgatatttca gttcctgatt gtaaatacct cctaagcctg aagcttctgt 200

tactagccat tgtgagcttc agttttcttca tctgcaaaat gggcataata 250

caatctattc ttgccacatc aagggattgt tattccttta aaaaaaaacc 300

aataccaaag aagcctacaa tggtggcctt agccaaaatt ctgttgattt 350

caacgttggt ttattcactt ctatcgggga gccatggaaa agaaaatcaa 400

gacataaaca caacacagaa cattgcagaa gtttttaaaa caatggaaaa 450

taaacctatt tcttttgaaa gtgaagcaaa cttaaactca gataaagaaa 500

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ttgggtgcct taaaaactca atgagaatca tggt 2084

<210> 176
<211> 334
<212> PRT
<213> Homo Sapien

<400> 176
Met Leu Ala Leu Ala Lys Ile Leu Leu Ile Ser Thr Leu Phe Tyr
1 5 10 15
Ser Leu Leu Ser Gly Ser His Gly Lys Glu Asn Gln Asp Ile Asn
20 25 30
Thr Thr Gln Asn Ile Ala Glu Val Phe Lys Thr Met Glu Asn Lys
35 40 45
Pro Ile Ser Leu Glu Ser Glu Ala Asn Leu Asn Ser Asp Lys Glu
50 55 60
Asn Ile Thr Thr Ser Asn Leu Lys Ala Ser His Ser Pro Pro Leu
65 70 75
Asn Leu Pro Asn Asn Ser His Gly Ile Thr Asp Phe Ser Ser Asn
80 85 90
Ser Ser Ala Glu His Ser Leu Gly Ser Leu Lys Pro Thr Ser Thr
95 100 105
Ile Ser Thr Ser Pro Pro Leu Ile His Ser Phe Val Ser Lys Val
110 115 120
Pro Trp Asn Ala Pro Ile Ala Asp Glu Asp Leu Leu Pro Ile Ser
125 130 135
Ala His Pro Asn Ala Thr Pro Ala Leu Ser Ser Glu Asn Phe Thr
140 145 150
Trp Ser Leu Val Asn Asp Thr Val Lys Thr Pro Asp Asn Ser Ser
155 160 165
Ile Thr Val Ser Ile Leu Ser Ser Glu Pro Thr Ser Pro Ser Val
170 175 180
Thr Pro Leu Ile Val Glu Pro Ser Gly Trp Leu Thr Thr Asn Ser
185 190 195
Asp Ser Phe Thr Gly Phe Thr Pro Tyr Gln Glu Lys Thr Thr Leu
200 205 210
Gln Pro Thr Leu Lys Phe Thr Asn Asn Ser Lys Leu Phe Pro Asn
215 220 225
Thr Ser Asp Pro Gln Lys Glu Asn Arg Asn Thr Gly Ile Val Phe

	230		235		240
Gly Ala Ile Leu	Gly Ala Ile Leu	Gly Val Ser Leu Leu Thr	Leu		
	245		250		255
Val Gly Tyr Leu	Leu Cys Gly Lys Arg	Lys Thr Asp Ser Phe	Ser		
	260		265		270
His Arg Arg Leu	Tyr Asp Asp Arg Asn	Glu Pro Val Leu Arg	Leu		
	275		280		285
Asp Asn Ala Pro	Glu Pro Tyr Asp Val	Ser Phe Gly Asn Ser	Ser		
	290		295		300
Tyr Tyr Asn Pro	Thr Leu Asn Asp Ser	Ala Met Pro Glu Ser	Glu		
	305		310		315
Glu Asn Ala Arg	Asp Gly Ile Pro Met	Asp Asp Ile Pro Pro	Leu		
	320		325		330
Arg Thr Ser Val					

<210> 177
 <211> 1964
 <212> DNA
 <213> Homo Sapien

<400> 177
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 caaattccga ttactgttgc tgttgacttt gtgcctgaca gtggttgggt 200
 gggccaccag taactacttc gtgggtgccca ttcaagagat tcctaaagca 250
 aaggagttca tggctaattt ccataagacc ctcatthttgg ggaagggaaa 300
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tgtaaaatga ttttgtacaa gtaggatatg aattagcagt ttacaagttt 1900
acatattaac taataataaa tatgtctatc aaatacctct gtagtaaaat 1950
gtgaaaaagc aaaa 1964

<210> 178

<211> 344

<212> PRT

<213> Homo Sapien

<400> 178

Met	Gly	Phe	Asn	Leu	Thr	Phe	His	Leu	Ser	Tyr	Lys	Phe	Arg	Leu
1					5				10					15

Leu	Leu	Leu	Leu	Thr	Leu	Cys	Leu	Thr	Val	Val	Gly	Trp	Ala	Thr	
				20					25					30	
Ser	Asn	Tyr	Phe	Val	Gly	Ala	Ile	Gln	Glu	Ile	Pro	Lys	Ala	Lys	
				35					40					45	
Glu	Phe	Met	Ala	Asn	Phe	His	Lys	Thr	Leu	Ile	Leu	Gly	Lys	Gly	
				50					55					60	
Lys	Thr	Leu	Thr	Asn	Glu	Ala	Ser	Thr	Lys	Lys	Val	Glu	Leu	Asp	
				65					70					75	
Asn	Cys	Pro	Ser	Val	Ser	Pro	Tyr	Leu	Arg	Gly	Gln	Ser	Lys	Leu	
				80					85					90	
Ile	Phe	Lys	Pro	Asp	Leu	Thr	Leu	Glu	Glu	Val	Gln	Ala	Glu	Asn	
				95					100					105	
Pro	Lys	Val	Ser	Arg	Gly	Arg	Tyr	Arg	Pro	Gln	Glu	Cys	Lys	Ala	
				110					115					120	
Leu	Gln	Arg	Val	Ala	Ile	Leu	Val	Pro	His	Arg	Asn	Arg	Glu	Lys	
				125					130					135	
His	Leu	Met	Tyr	Leu	Leu	Glu	His	Leu	His	Pro	Phe	Leu	Gln	Arg	
				140					145					150	
Gln	Gln	Leu	Asp	Tyr	Gly	Ile	Tyr	Val	Ile	His	Gln	Ala	Glu	Gly	
				155					160					165	
Lys	Lys	Phe	Asn	Arg	Ala	Lys	Leu	Leu	Asn	Val	Gly	Tyr	Leu	Glu	
				170					175					180	
Ala	Leu	Lys	Glu	Glu	Asn	Trp	Asp	Cys	Phe	Ile	Phe	His	Asp	Val	
				185					190					195	
Asp	Leu	Val	Pro	Glu	Asn	Asp	Phe	Asn	Leu	Tyr	Lys	Cys	Glu	Glu	
				200					205					210	
His	Pro	Lys	His	Leu	Val	Val	Gly	Arg	Asn	Ser	Thr	Gly	Tyr	Arg	
				215					220					225	
Leu	Arg	Tyr	Ser	Gly	Tyr	Phe	Gly	Gly	Val	Thr	Ala	Leu	Ser	Arg	
				230					235					240	
Glu	Gln	Phe	Phe	Lys	Val	Asn	Gly	Phe	Ser	Asn	Asn	Tyr	Trp	Gly	
				245					250					255	
Trp	Gly	Gly	Glu	Asp	Asp	Asp	Leu	Arg	Leu	Arg	Val	Glu	Leu	Gln	
				260					265					270	
Arg	Met	Lys	Ile	Ser	Arg	Pro	Leu	Pro	Glu	Val	Gly	Lys	Tyr	Thr	
				275					280					285	
Met	Val	Phe	His	Thr	Arg	Asp	Lys	Gly	Asn	Glu	Val	Asn	Ala	Glu	
				290					295					300	
Arg	Met	Lys	Leu	Leu	His	Gln	Val	Ser	Arg	Val	Trp	Arg	Thr	Asp	

	305		310		315									
Gly	Leu	Ser	Ser	Cys	Ser	Tyr	Lys	Leu	Val	Ser	Val	Glu	His	Asn
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Pro	Leu	Tyr	Ile	Asn	Ile	Thr	Val	Asp	Phe	Trp	Phe	Gly	Ala	
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 <212> DNA
 <213> Homo Sapien

<400> 179
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 ccgcatactc tggcttgccct gcctcctgcc ctgggccccg gcaggggtgg 200
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<211> 423

<212> PRT

<213> Homo Sapien

<400> 180

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				20					25					30	
Tyr	Glu	Leu	Asn	Leu	Thr	Thr	Asp	Ser	Pro	Ala	Thr	Thr	Gly	Ala	
				35					40					45	
Val	Val	Thr	Ile	Ser	Ala	Ser	Leu	Val	Ala	Lys	Asp	Asn	Gly	Ser	
				50					55					60	
Leu	Ala	Leu	Pro	Ala	Asp	Ala	His	Leu	Tyr	Arg	Phe	His	Trp	Ile	
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His	Thr	Pro	Leu	Val	Leu	Thr	Gly	Lys	Met	Glu	Lys	Gly	Leu	Ser	
				80					85					90	
Ser	Thr	Ile	Arg	Val	Val	Gly	His	Val	Pro	Gly	Glu	Phe	Pro	Val	
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Ser	Val	Trp	Val	Thr	Ala	Ala	Asp	Cys	Trp	Met	Cys	Gln	Pro	Val	
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Ala	Arg	Gly	Phe	Val	Val	Leu	Pro	Ile	Thr	Glu	Phe	Leu	Val	Gly	
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Asp	Leu	Val	Val	Thr	Gln	Asn	Thr	Ser	Leu	Pro	Trp	Pro	Ser	Ser	
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Tyr	Leu	Thr	Lys	Thr	Val	Leu	Lys	Val	Ser	Phe	Leu	Leu	His	Asp	
				155					160					165	
Pro	Ser	Asn	Phe	Leu	Lys	Thr	Ala	Leu	Phe	Leu	Tyr	Ser	Trp	Asp	
				170					175					180	
Phe	Gly	Asp	Gly	Thr	Gln	Met	Val	Thr	Glu	Asp	Ser	Val	Val	Tyr	
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Tyr	Asn	Tyr	Ser	Ile	Ile	Gly	Thr	Phe	Thr	Val	Lys	Leu	Lys	Val	
				200					205					210	
Val	Ala	Glu	Trp	Glu	Glu	Val	Glu	Pro	Asp	Ala	Thr	Arg	Ala	Val	
				215					220					225	
Lys	Gln	Lys	Thr	Gly	Asp	Phe	Ser	Ala	Ser	Leu	Lys	Leu	Gln	Glu	
				230					235					240	
Thr	Leu	Arg	Gly	Ile	Gln	Val	Leu	Gly	Pro	Thr	Leu	Ile	Gln	Thr	
				245					250					255	

Phe Gln Lys Met Thr Val Thr Leu Asn Phe Leu Gly Ser Pro Pro
260 265 270

Leu Thr Val Cys Trp Arg Leu Lys Pro Glu Cys Leu Pro Leu Glu
275 280 285

Glu Gly Glu Cys His Pro Val Ser Val Ala Ser Thr Ala Tyr Asn
290 295 300

Leu Thr His Thr Phe Arg Asp Pro Gly Asp Tyr Cys Phe Ser Ile
305 310 315

Arg Ala Glu Asn Ile Ile Ser Lys Thr His Gln Tyr His Lys Ile
320 325 330

Gln Val Trp Pro Ser Arg Ile Gln Pro Ala Val Phe Ala Phe Pro
335 340 345

Cys Ala Thr Leu Ile Thr Val Met Leu Ala Phe Ile Met Tyr Met
350 355 360

Thr Leu Arg Asn Ala Thr Gln Gln Lys Asp Met Val Glu Asn Pro
365 370 375

Glu Pro Pro Ser Gly Val Arg Cys Cys Cys Gln Met Cys Cys Gly
380 385 390

Pro Phe Leu Leu Glu Thr Pro Ser Glu Tyr Leu Glu Ile Val Arg
395 400 405

Glu Asn His Gly Leu Leu Pro Pro Leu Tyr Lys Ser Val Lys Thr
410 415 420

Tyr Thr Val

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<211> 1533
<212> DNA
<213> Homo Sapien

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ctactgcgcc tgggagcgcg ggtgatcatg ggctgccggg accgcgcgcg 300
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agtggggccc agagcctggc gtcagcgggg tgggcgagct catagtccgg 400

Arg	Leu	Arg	Arg	Gly	Gly	Asp	Pro	Gly	Leu	Met	His	Gly	Lys	Thr	35	40	45
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Ala	Glu	Leu	Leu	Arg	Leu	Gly	Ala	Arg	Val	Ile	Met	Gly	Cys	Arg	65	70	75
Asp	Arg	Ala	Arg	Ala	Glu	Glu	Ala	Ala	Gly	Gln	Leu	Arg	Arg	Glu	80	85	90
Leu	Arg	Gln	Ala	Ala	Glu	Cys	Gly	Pro	Glu	Pro	Gly	Val	Ser	Gly	95	100	105
Val	Gly	Glu	Leu	Ile	Val	Arg	Glu	Leu	Asp	Leu	Ala	Ser	Leu	Arg	110	115	120
Ser	Val	Arg	Ala	Phe	Cys	Gln	Glu	Met	Leu	Gln	Glu	Glu	Pro	Arg	125	130	135
Leu	Asp	Val	Leu	Ile	Asn	Asn	Ala	Gly	Ile	Phe	Gln	Cys	Pro	Tyr	140	145	150
Met	Lys	Thr	Glu	Asp	Gly	Phe	Glu	Met	Gln	Phe	Gly	Val	Asn	His	155	160	165
Leu	Gly	His	Phe	Leu	Leu	Thr	Asn	Leu	Leu	Leu	Gly	Leu	Leu	Lys	170	175	180
Ser	Ser	Ala	Pro	Ser	Arg	Ile	Val	Val	Val	Ser	Ser	Lys	Leu	Tyr	185	190	195
Lys	Tyr	Gly	Asp	Ile	Asn	Phe	Asp	Asp	Leu	Asn	Ser	Glu	Gln	Ser	200	205	210
Tyr	Asn	Lys	Ser	Phe	Cys	Tyr	Ser	Arg	Ser	Lys	Leu	Ala	Asn	Ile	215	220	225
Leu	Phe	Thr	Arg	Glu	Leu	Ala	Arg	Arg	Leu	Glu	Gly	Thr	Asn	Val	230	235	240
Thr	Val	Asn	Val	Leu	His	Pro	Gly	Ile	Val	Arg	Thr	Asn	Leu	Gly	245	250	255
Arg	His	Ile	His	Ile	Pro	Leu	Leu	Val	Lys	Pro	Leu	Phe	Asn	Leu	260	265	270
Val	Ser	Trp	Ala	Phe	Phe	Lys	Thr	Pro	Val	Glu	Gly	Ala	Gln	Thr	275	280	285
Ser	Ile	Tyr	Leu	Ala	Ser	Ser	Pro	Glu	Val	Glu	Gly	Val	Ser	Gly	290	295	300
Arg	Tyr	Phe	Gly	Asp	Cys	Lys	Glu	Glu	Glu	Leu	Leu	Pro	Lys	Ala	305	310	315
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330

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tgccaccag gaaaaagagg gtcctctgg gagatgtatg cttactctct 250
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<210> 184
 <211> 263
 <212> PRT
 <213> Homo Sapien

<400> 184
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 Thr Gln Ile Leu Thr Gly Lys Glu Leu Arg Val Ala Thr Gln Glu
 35 40 45
 Lys Glu Gly Ser Ser Gly Arg Cys Met Leu Thr Leu Leu Gly Leu
 50 55 60
 Ser Phe Ile Leu Ala Gly Leu Ile Val Gly Gly Ala Cys Ile Tyr
 65 70 75
 Lys Tyr Phe Met Pro Lys Ser Thr Ile Tyr Arg Gly Glu Met Cys
 80 85 90
 Phe Phe Asp Ser Glu Asp Pro Ala Asn Ser Leu Arg Gly Gly Glu
 95 100 105
 Pro Asn Phe Leu Pro Val Thr Glu Glu Ala Asp Ile Arg Glu Asp
 110 115 120
 Asp Asn Ile Ala Ile Ile Asp Val Pro Val Pro Ser Phe Ser Asp
 125 130 135
 Ser Asp Pro Ala Ala Ile Ile His Asp Phe Glu Lys Gly Met Thr
 140 145 150
 Ala Tyr Leu Asp Leu Leu Leu Gly Asn Cys Tyr Leu Met Pro Leu
 155 160 165
 Asn Thr Ser Ile Val Met Pro Pro Lys Asn Leu Val Glu Leu Phe
 170 175 180

Gly Lys Leu Ala Ser Gly Arg Tyr Leu Pro Gln Thr Tyr Val Val
185 190 195

Arg Glu Asp Leu Val Ala Val Glu Glu Ile Arg Asp Val Ser Asn
200 205 210

Leu Gly Ile Phe Ile Tyr Gln Leu Cys Asn Asn Arg Lys Ser Phe
215 220 225

Arg Leu Arg Arg Arg Asp Leu Leu Leu Gly Phe Asn Lys Arg Ala
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Ile Asp Lys Cys Trp Lys Ile Arg His Phe Pro Asn Glu Phe Ile
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Val Glu Thr Lys Ile Cys Gln Glu
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<210> 185
<211> 485
<212> DNA
<213> Homo Sapien

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<210> 186
<211> 84
<212> PRT
<213> Homo Sapien

<400> 186
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20 25 30

Thr Gly Gln Leu Ala Glu Leu Gln Pro Gln Asp Arg Ala Gly Ala
35 40 45

Arg Ala Ser Trp Met Pro Met Phe Gln Arg Arg Arg Arg Arg Asp
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Thr His Phe Pro Ile Cys Ile Phe Cys Cys Gly Cys Cys His Arg
65 70 75

Ser Lys Cys Gly Met Cys Cys Lys Thr
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<210> 187
<211> 2359
<212> DNA
<213> Homo Sapien

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<210> 188
<211> 456
<212> PRT
<213> Homo Sapien
<400> 188

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Ile	Val	Pro	Ala	Ile	Phe	Gly	Val	Ser	Phe	Gly	Ile	Arg	Lys	Leu		35	40	45	
Tyr	Met	Lys	Ser	Leu	Leu	Lys	Ile	Phe	Ala	Trp	Ala	Thr	Leu	Arg		50	55	60	
Met	Glu	Arg	Gly	Ala	Lys	Glu	Lys	Asn	His	Gln	Leu	Tyr	Lys	Pro		65	70	75	
Tyr	Thr	Asn	Gly	Ile	Ile	Ala	Lys	Asp	Pro	Thr	Ser	Leu	Glu	Glu		80	85	90	
Glu	Ile	Lys	Glu	Ile	Arg	Arg	Ser	Gly	Ser	Ser	Lys	Ala	Leu	Asp		95	100	105	
Asn	Thr	Pro	Glu	Phe	Glu	Leu	Ser	Asp	Ile	Phe	Tyr	Phe	Cys	Arg		110	115	120	
Lys	Gly	Met	Glu	Thr	Ile	Met	Asp	Asp	Glu	Val	Thr	Lys	Arg	Phe		125	130	135	
Ser	Ala	Glu	Glu	Leu	Glu	Ser	Trp	Asn	Leu	Leu	Ser	Arg	Thr	Asn		140	145	150	
Tyr	Asn	Phe	Gln	Tyr	Ile	Ser	Leu	Arg	Leu	Thr	Val	Leu	Trp	Gly		155	160	165	
Leu	Gly	Val	Leu	Ile	Arg	Tyr	Cys	Phe	Leu	Leu	Pro	Leu	Arg	Ile		170	175	180	
Ala	Leu	Ala	Phe	Thr	Gly	Ile	Ser	Leu	Leu	Val	Val	Gly	Thr	Thr		185	190	195	
Val	Val	Gly	Tyr	Leu	Pro	Asn	Gly	Arg	Phe	Lys	Glu	Phe	Met	Ser		200	205	210	
Lys	His	Val	His	Leu	Met	Cys	Tyr	Arg	Ile	Cys	Val	Arg	Ala	Leu		215	220	225	
Thr	Ala	Ile	Ile	Thr	Tyr	His	Asp	Arg	Glu	Asn	Arg	Pro	Arg	Asn		230	235	240	
Gly	Gly	Ile	Cys	Val	Ala	Asn	His	Thr	Ser	Pro	Ile	Asp	Val	Ile		245	250	255	
Ile	Leu	Ala	Ser	Asp	Gly	Tyr	Tyr	Ala	Met	Val	Gly	Gln	Val	His		260	265	270	
Gly	Gly	Leu	Met	Gly	Val	Ile	Gln	Arg	Ala	Met	Val	Lys	Ala	Cys		275	280	285	
Pro	His	Val	Trp	Phe	Glu	Arg	Ser	Glu	Val	Lys	Asp	Arg	His	Leu					

	290	295	300
Val Ala Lys Arg	Leu Thr Glu His Val	Gln Asp Lys Ser Lys	Leu
	305	310	315
Pro Ile Leu Ile	Phe Pro Glu Gly Thr	Cys Ile Asn Asn Thr	Ser
	320	325	330
Val Met Met Phe	Lys Lys Gly Ser Phe	Glu Ile Gly Ala Thr	Val
	335	340	345
Tyr Pro Val Ala	Ile Lys Tyr Asp Pro	Gln Phe Gly Asp Ala	Phe
	350	355	360
Trp Asn Ser Ser	Lys Tyr Gly Met Val	Thr Tyr Leu Leu Arg	Met
	365	370	375
Met Thr Ser Trp	Ala Ile Val Cys Ser	Val Trp Tyr Leu Pro	Pro
	380	385	390
Met Thr Arg Glu	Ala Asp Glu Asp Ala	Val Gln Phe Ala Asn	Arg
	395	400	405
Val Lys Ser Ala	Ile Ala Arg Gln Gly	Gly Leu Val Asp Leu	Leu
	410	415	420
Trp Asp Gly Gly	Leu Lys Arg Glu Lys	Val Lys Asp Thr Phe	Lys
	425	430	435
Glu Glu Gln Gln	Lys Leu Tyr Ser Lys	Met Ile Val Gly Asn	His
	440	445	450
Lys Asp Arg Ser	Arg Ser		
	455		

<210> 189
 <211> 1103
 <212> DNA
 <213> Homo Sapien

<400> 189
 gccctcgaa accaggactc cagcacctct ggtcccgccc tcacccggac 50
 ccctggccct cacgtctcct ccagggatgg cgctggcggc tttgatgatc 100
 gccctcggca gcctcggcct ccacacctgg caggcccagg ctgttccac 150
 catcctgccc ctgggcctgg ctccagacac ctttgacgat acctatgtgg 200
 gttgtgcaga ggagatggag gagaaggcag cccccctgct aaaggaggaa 250
 atggcccacc atgccttgct gcgggaatcc tgggaggcag ccaggagac 300
 ctgggaggac aagcgtcgag ggcttacctt gccccctggc ttcaaagccc 350
 agaatggaat agccattatg gtctacacca actcatcgaa caccttgtac 400
 tgggagttga atcaggccgt gcggacgggc ggaggctccc gggagctcta 450

Ser	Arg	Glu	Leu	Tyr	Met	Arg	His	Phe	Pro	Phe	Lys	Ala	Leu	His
				125					130					135
Phe	Tyr	Leu	Ile	Arg	Ala	Leu	Gln	Leu	Leu	Arg	Gly	Ser	Gly	Gly
				140					145					150
Cys	Ser	Arg	Gly	Pro	Gly	Glu	Val	Val	Phe	Arg	Gly	Val	Gly	Ser
				155					160					165
Leu	Arg	Phe	Glu	Pro	Lys	Arg	Leu	Gly	Asp	Ser	Val	Arg	Leu	Gly
				170					175					180
Gln	Phe	Ala	Ser	Ser	Ser	Leu	Asp	Lys	Ala	Val	Ala	His	Arg	Phe
				185					190					195
Gly	Glu	Lys	Arg	Arg	Gly	Cys	Val	Ser	Ala	Pro	Gly	Val	Gln	Leu
				200					205					210
Gly	Ser	Gln	Ser	Glu	Gly	Ala	Ser	Ser	Leu	Pro	Pro	Trp	Lys	Thr
				215					220					225
Leu	Leu	Leu	Ala	Pro	Gly	Glu	Phe	Gln	Leu	Ser	Gly	Val	Gly	Pro
				230					235					240

<210> 191
 <211> 1076
 <212> DNA
 <213> Homo Sapien

<400> 191
 gtggcttcat ttccagtggct gacttccaga gagcaatatg gctgggttccc 50
 caacatgcct caccctcatc tatatccttt ggcagctcac agggtcagca 100
 gcctctggac ccgtgaaaga gctggctcggg tccgttggtg gggccgtgac 150
 tttccccctg aagtccaaag taaagcaagt tgactctatt gtctggacct 200
 tcaacacaac cctcttctgt accatacagc cagaaggggg cactatcata 250
 gtgacccaaa atcgtaatag ggagagagta gacttcccag atggaggcta 300
 ctccctgaag ctcagcaaac tgaagaagaa tgactcaggg atctactatg 350
 tggggatata cagctcatca ctccagcagc cctccaccca ggagtacgtg 400
 ctgcatgtct acgagcacct gtcaaagcct aaagtcacca tgggtctgca 450
 gagcaataag aatggcacct gtgtgaccaa tctgacatgc tgcattggaac 500
 atggggaaga ggatgtgatt tatacctgga aggccttggg gcaagcagcc 550
 aatgagtccc ataattgggtc catcctcccc atctcctgga gatggggaga 600
 aagtgatatg accttcatct gcgttgccag gaaccctgtc agcagaaaact 650
 tctcaagccc catccttgcc aggaagctct gtgaagggtg tgctgatgac 700

ccagattcct ccatggctct cctgtgtctc ctgttggtgc ccctcctgct 750
cagtctcttt gtactggggc tatttctttg gtttctgaag agagagagac 800
aagaagagta cattgaagag aagaagagag tggacatttg tcgggaaact 850
cctaacatat gccccattc tggagagaac acagagtacg acacaatccc 900
tcacactaat agaacaatcc taaaggaaga tccagcaaat acggtttact 950
ccactgtgga aataccgaaa aagatggaaa atccccactc actgctcagc 1000
atgccagaca caccaaggct atttgccat gagaatgtta tctagacagc 1050
agtgcactcc cctaagtctc tgctca 1076

<210> 192
<211> 335
<212> PRT
<213> Homo Sapien

<400> 192

Met	Ala	Gly	Ser	Pro	Thr	Cys	Leu	Thr	Leu	Ile	Tyr	Ile	Leu	Trp
1				5					10					15
Gln	Leu	Thr	Gly	Ser	Ala	Ala	Ser	Gly	Pro	Val	Lys	Glu	Leu	Val
			20						25					30
Gly	Ser	Val	Gly	Gly	Ala	Val	Thr	Phe	Pro	Leu	Lys	Ser	Lys	Val
			35						40					45
Lys	Gln	Val	Asp	Ser	Ile	Val	Trp	Thr	Phe	Asn	Thr	Thr	Pro	Leu
			50						55					60
Val	Thr	Ile	Gln	Pro	Glu	Gly	Gly	Thr	Ile	Ile	Val	Thr	Gln	Asn
			65						70					75
Arg	Asn	Arg	Glu	Arg	Val	Asp	Phe	Pro	Asp	Gly	Gly	Tyr	Ser	Leu
			80						85					90
Lys	Leu	Ser	Lys	Leu	Lys	Lys	Asn	Asp	Ser	Gly	Ile	Tyr	Tyr	Val
			95						100					105
Gly	Ile	Tyr	Ser	Ser	Ser	Leu	Gln	Gln	Pro	Ser	Thr	Gln	Glu	Tyr
			110						115					120
Val	Leu	His	Val	Tyr	Glu	His	Leu	Ser	Lys	Pro	Lys	Val	Thr	Met
			125						130					135
Gly	Leu	Gln	Ser	Asn	Lys	Asn	Gly	Thr	Cys	Val	Thr	Asn	Leu	Thr
			140						145					150
Cys	Cys	Met	Glu	His	Gly	Glu	Glu	Asp	Val	Ile	Tyr	Thr	Trp	Lys
			155						160					165
Ala	Leu	Gly	Gln	Ala	Ala	Asn	Glu	Ser	His	Asn	Gly	Ser	Ile	Leu
			170						175					180

Pro Ile Ser Trp Arg Trp Gly Glu Ser Asp Met Thr Phe Ile Cys
185 190 195

Val Ala Arg Asn Pro Val Ser Arg Asn Phe Ser Ser Pro Ile Leu
200 205 210

Ala Arg Lys Leu Cys Glu Gly Ala Ala Asp Asp Pro Asp Ser Ser
215 220 225

Met Val Leu Leu Cys Leu Leu Leu Val Pro Leu Leu Leu Ser Leu
230 235 240

Phe Val Leu Gly Leu Phe Leu Trp Phe Leu Lys Arg Glu Arg Gln
245 250 255

Glu Glu Tyr Ile Glu Glu Lys Lys Arg Val Asp Ile Cys Arg Glu
260 265 270

Thr Pro Asn Ile Cys Pro His Ser Gly Glu Asn Thr Glu Tyr Asp
275 280 285

Thr Ile Pro His Thr Asn Arg Thr Ile Leu Lys Glu Asp Pro Ala
290 295 300

Asn Thr Val Tyr Ser Thr Val Glu Ile Pro Lys Lys Met Glu Asn
305 310 315

Pro His Ser Leu Leu Thr Met Pro Asp Thr Pro Arg Leu Phe Ala
320 325 330

Tyr Glu Asn Val Ile
335

<210> 193
<211> 1969
<212> DNA
<213> Homo Sapien

<400> 193
ggaggaggga gggcgggcag gcgccagccc agagcagccc cgggcaccag 50
cacggactct ctcttcagc ccaggtgccc cccactctcg ctccattcgg 100
cgggagcacc cagtcctgta cgccaaggaa ctggtcctgg gggcaccatg 150
gtttcggcgg cagccccag cctcctcatc cttctgttgc tgctgctggg 200
gtctgtgcct gctaccgacg cccgctctgt gccctgaag gccacgttcc 250
tgaggatgt ggcgggtagt ggggaggccg agggctcgtc ggcctcctcc 300
ccgagcctcc cgccaccctg gaccccgcc ctcagcccca catcgatggg 350
gccccagccc acaaccctgg ggggcccac accccacc aacttcctgg 400
atgggatagt ggacttcttc cgccagtacg tgatgctgat tgctgtggtg 450
ggctcctgg cctttctgct gatgttcac gtctgtgcc cggtcatcac 500

ccggcagaag cagaaggcct cggcctatta cccatcgtcc ttccccaaga 550
 agaagtacgt ggaccagagt gaccgggccc ggggcccccg ggccttcagt 600
 gaggtccccg acagagcccc cgacagcagg cccgaggaag ccctggattc 650
 ctccccggcag ctccaggccg acatcttggc cgccaccag aacctcaagt 700
 cccccaccag ggctgcactg ggcgggtggg acggagccag gatggtggag 750
 ggcaggggcg cagaggaaga ggagaagggc agccaggagg gggaccagga 800
 agtccaggga catgggggcc cagtggagac accagaggcg caggaggagc 850
 cgtgctcagg ggtccttgag ggggctgtgg tggccggtga gggccaaggg 900
 gagctggaag ggtctctctt gttagcccag gaagcccagg gaccagtggg 950
 tccccccgaa agcccctgtg cttgcagcag tgtccacccc agtgtctaac 1000
 agtcctcccc ggctgccagc cctgactgtc gggcccccaa gtggtcacct 1050
 ccccggtgat gaaaaggcct tcagccctga ctgcttctg aactccctc 1100
 cttggcctcc ctgtggtgcc aatcccagca tgtgctgatt ctacagcagg 1150
 cagaaatgct ggtccccggt gcccggagg aatcttacca agtgccatca 1200
 tccttcacct cagcagcccc aaagggtac atcctacagc acagctcccc 1250
 tgacaaagtg agggagggca cgtgtccctg tgacagccag gataaaacat 1300
 cccccaaagt gctgggatta caggcgtgag ccaccgtgcc cggcccaaac 1350
 tactttttta aacagctaca gggtaaaatc ctgcagcacc cactctggaa 1400
 aatactgtc ttaattttcc tgaagggtgg cccctgtttc tagttgggtc 1450
 aggattaggg atgtggggta tagggcattt aaatcctctc aagcgtctc 1500
 caagcacccc cggcctgggg gtgagtttct catcccgcta ctgctgctgg 1550
 gatcagggtg aatgaatgga actcttctg tctggcctcc aaagcagcct 1600
 agaagctgag gggctgtgtt tgaggggacc tccaccctgg ggaagtccga 1650
 ggggctgggg aagggtttct gacgccagc ctggagcagg ggggccctgg 1700
 ccaccccctg ttgctcacac attgtctggc agcctgtgtc cacaatattc 1750
 gtcagtcctc gacagggagc ctgggctccg tctgcttta gggaggctct 1800
 ggcaggaggt cctctcccc atccctccat ctggggctcc cccaacctct 1850
 gcacagctct ccagggtctg agatataatg caccagcaca ataaaccttt 1900
 attccggcct gaaaaaaaa aaaaaaaaa aaaaaaaaa aaaaaaaaa 1950

aaaaaaaaa aaaaaaaga 1969

<210> 194

<211> 283

<212> PRT

<213> Homo Sapien

<400> 194

Met	Val	Ser	Ala	Ala	Ala	Pro	Ser	Leu	Leu	Ile	Leu	Leu	Leu	Leu	
1				5					10					15	
Leu	Leu	Gly	Ser	Val	Pro	Ala	Thr	Asp	Ala	Arg	Ser	Val	Pro	Leu	
				20					25					30	
Lys	Ala	Thr	Phe	Leu	Glu	Asp	Val	Ala	Gly	Ser	Gly	Glu	Ala	Glu	
				35					40					45	
Gly	Ser	Ser	Ala	Ser	Ser	Pro	Ser	Leu	Pro	Pro	Pro	Trp	Thr	Pro	
				50					55					60	
Ala	Leu	Ser	Pro	Thr	Ser	Met	Gly	Pro	Gln	Pro	Thr	Thr	Leu	Gly	
				65					70					75	
Gly	Pro	Ser	Pro	Pro	Thr	Asn	Phe	Leu	Asp	Gly	Ile	Val	Asp	Phe	
				80					85					90	
Phe	Arg	Gln	Tyr	Val	Met	Leu	Ile	Ala	Val	Val	Gly	Ser	Leu	Ala	
				95					100					105	
Phe	Leu	Leu	Met	Phe	Ile	Val	Cys	Ala	Ala	Val	Ile	Thr	Arg	Gln	
				110					115					120	
Lys	Gln	Lys	Ala	Ser	Ala	Tyr	Tyr	Pro	Ser	Ser	Phe	Pro	Lys	Lys	
				125					130					135	
Lys	Tyr	Val	Asp	Gln	Ser	Asp	Arg	Ala	Gly	Gly	Pro	Arg	Ala	Phe	
				140					145					150	
Ser	Glu	Val	Pro	Asp	Arg	Ala	Pro	Asp	Ser	Arg	Pro	Glu	Glu	Ala	
				155					160					165	
Leu	Asp	Ser	Ser	Arg	Gln	Leu	Gln	Ala	Asp	Ile	Leu	Ala	Ala	Thr	
				170					175					180	
Gln	Asn	Leu	Lys	Ser	Pro	Thr	Arg	Ala	Ala	Leu	Gly	Gly	Gly	Asp	
				185					190					195	
Gly	Ala	Arg	Met	Val	Glu	Gly	Arg	Gly	Ala	Glu	Glu	Glu	Glu	Lys	
				200					205					210	
Gly	Ser	Gln	Glu	Gly	Asp	Gln	Glu	Val	Gln	Gly	His	Gly	Val	Pro	
				215					220					225	
Val	Glu	Thr	Pro	Glu	Ala	Gln	Glu	Glu	Pro	Cys	Ser	Gly	Val	Leu	
				230					235					240	
Glu	Gly	Ala	Val	Val	Ala	Gly	Glu	Gly	Gln	Gly	Glu	Leu	Glu	Gly	
				245					250					255	

Ser Leu Leu Leu Ala Gln Glu Ala Gln Gly Pro Val Gly Pro Pro
260 265 270

Glu Ser Pro Cys Ala Cys Ser Ser Val His Pro Ser Val
275 280

<210> 195
<211> 860
<212> DNA
<213> Homo Sapien

<400> 195
gaaagacgtg gtcctgacag acagacaatc ctattcccta ccaaaatgaa 50
gatgctgctg ctgctgtggt tgggactgac cctagtctgt gtccatgcag 100
aagaagctag ttctacggga aggaacttta atgtagaaaa gattaatggg 150
gaatggcata ctattatcct ggcctctgac aaaagagaaa agatagaaga 200
acatggcaac tttagacttt ttctggagca aatccatgtc ttggagaatt 250
ccttagttct taaagtccat actgtaagag atgaagagtg ctccgaatta 300
tctatggttg ctgacaaaac agaaaaggct ggtgaatatt ctgtgacgta 350
tgatggattc aatacattta ctatacctaa gacagactat gataactttc 400
ttatggctca cctcattaac gaaaaggatg gggaaacctt ccagctgatg 450
gggctctatg gccgagaacc agatttgagt tcagacatca aggaaagggtt 500
tgcacaacta tgtgaggagc atggaatcct tagagaaaat atcattgacc 550
tatccaatgc caatcgctgc ctccaggccc gagaatgaag aatggcctga 600
gcctccagtg ttgagtggac acttctcacc aggactccac catcatccct 650
tcctatccat acagcatccc cagtataaat tctgtgatct gcattccatc 700
ctgtctcact gagaagtcca attccagtct atcaacatgt tacctaggat 750
acctcatcaa gaatcaaaga cttctttaaa tttctctttg atacaccctt 800
gacaattttt catgaaatta ttctcttccc tgttcaataa atgattaccc 850
ttgcacttaa 860

<210> 196
<211> 180
<212> PRT
<213> Homo Sapien

<400> 196
Met Lys Met Leu Leu Leu Cys Leu Gly Leu Thr Leu Val Cys
1 5 10 15
Val His Ala Glu Glu Ala Ser Ser Thr Gly Arg Asn Phe Asn Val

	20	25	30
Glu Lys Ile Asn Gly Glu Trp His Thr Ile Ile Leu Ala Ser Asp	35	40	45
Lys Arg Glu Lys Ile Glu Glu His Gly Asn Phe Arg Leu Phe Leu	50	55	60
Glu Gln Ile His Val Leu Glu Asn Ser Leu Val Leu Lys Val His	65	70	75
Thr Val Arg Asp Glu Glu Cys Ser Glu Leu Ser Met Val Ala Asp	80	85	90
Lys Thr Glu Lys Ala Gly Glu Tyr Ser Val Thr Tyr Asp Gly Phe	95	100	105
Asn Thr Phe Thr Ile Pro Lys Thr Asp Tyr Asp Asn Phe Leu Met	110	115	120
Ala His Leu Ile Asn Glu Lys Asp Gly Glu Thr Phe Gln Leu Met	125	130	135
Gly Leu Tyr Gly Arg Glu Pro Asp Leu Ser Ser Asp Ile Lys Glu	140	145	150
Arg Phe Ala Gln Leu Cys Glu Glu His Gly Ile Leu Arg Glu Asn	155	160	165
Ile Ile Asp Leu Ser Asn Ala Asn Arg Cys Leu Gln Ala Arg Glu	170	175	180

<210> 197

<211> 766

<212> DNA

<213> Homo Sapien

<400> 197

ggctcgagcg tttctgagcc aggggtgacc atgacctgct gcgaaggatg 50

gacatcctgc aatggattca gcctgctggt tctactgctg ttaggagtag 100

ttctcaatgc gatacctcta attgtcagct tagttgagga agaccaattt 150

tctcaaaacc ccatctcttg ctttgagtgg tggttccag gaattatagg 200

agcaggtctg atggccattc cagcaacaac aatgtccttg acagcaagaa 250

aaagagcgtg ctgcaacaac agaactggaa tggtttctttc atcatttttc 300

agtgtgatca cagtcattgg tgctctgtat tgcattgctga tatccatcca 350

ggctctctta aaaggtcctc tcatgtgtaa ttctccaagc aacagtaatg 400

ccaattgtga attttcattg aaaaacatca gtgacattca tccagaatcc 450

ttcaacttgc agtggttttt caatgactct tgtgcacctc ctactggttt 500

caataaaccc accagtaacg acaccatggc gagtggctgg agagcatcta 550
 gtttccactt cgattctgaa gaaaacaaac ataggcttat ccacttctca 600
 gtatttttag gtctattgct tgttggaatt ctggaggtcc tgtttgggct 650
 cagtcagata gtcacgggtt tccttggctg tctgtgtgga gtctctaagc 700
 gaagaagtca aattgtgtag tttaatggga ataaaatgta agtatcagta 750
 gtttgaaaaa aaaaaa 766

<210> 198

<211> 229

<212> PRT

<213> Homo Sapien

<400> 198

Met	Thr	Cys	Cys	Glu	Gly	Trp	Thr	Ser	Cys	Asn	Gly	Phe	Ser	Leu	
1				5					10					15	
Leu	Val	Leu	Leu	Leu	Leu	Gly	Val	Val	Leu	Asn	Ala	Ile	Pro	Leu	
				20					25					30	
Ile	Val	Ser	Leu	Val	Glu	Glu	Asp	Gln	Phe	Ser	Gln	Asn	Pro	Ile	
				35					40					45	
Ser	Cys	Phe	Glu	Trp	Trp	Phe	Pro	Gly	Ile	Ile	Gly	Ala	Gly	Leu	
				50					55					60	
Met	Ala	Ile	Pro	Ala	Thr	Thr	Met	Ser	Leu	Thr	Ala	Arg	Lys	Arg	
				65					70					75	
Ala	Cys	Cys	Asn	Asn	Arg	Thr	Gly	Met	Phe	Leu	Ser	Ser	Phe	Phe	
				80					85					90	
Ser	Val	Ile	Thr	Val	Ile	Gly	Ala	Leu	Tyr	Cys	Met	Leu	Ile	Ser	
				95					100					105	
Ile	Gln	Ala	Leu	Leu	Lys	Gly	Pro	Leu	Met	Cys	Asn	Ser	Pro	Ser	
				110					115					120	
Asn	Ser	Asn	Ala	Asn	Cys	Glu	Phe	Ser	Leu	Lys	Asn	Ile	Ser	Asp	
				125					130					135	
Ile	His	Pro	Glu	Ser	Phe	Asn	Leu	Gln	Trp	Phe	Phe	Asn	Asp	Ser	
				140					145					150	
Cys	Ala	Pro	Pro	Thr	Gly	Phe	Asn	Lys	Pro	Thr	Ser	Asn	Asp	Thr	
				155					160					165	
Met	Ala	Ser	Gly	Trp	Arg	Ala	Ser	Ser	Phe	His	Phe	Asp	Ser	Glu	
				170					175					180	
Glu	Asn	Lys	His	Arg	Leu	Ile	His	Phe	Ser	Val	Phe	Leu	Gly	Leu	
				185					190					195	
Leu	Leu	Val	Gly	Ile	Leu	Glu	Val	Leu	Phe	Gly	Leu	Ser	Gln	Ile	

Val Ile Gly Phe Leu Gly Cys Leu Cys Gly Val Ser Lys Arg Arg
215 220 225

Ser Gln Ile Val

<210> 199
<211> 636
<212> DNA
<213> Homo Sapien

<400> 199
atccgttctc tgcgctgccca gctcaggtga gccctcgcca aggtgacctc 50
gcaggacact ggtgaaggag cagtgaggaa cctgcagagt cacacagttg 100
ctgaccaatt gagctgtgag cctggagcag atccgtgggc tgcagacccc 150
cgccccagtg cctctcccc tgcagccctg cccctogaac tgtgacatgg 200
agagagtgc cctggccctt ctctactgg caggcctgac tgccttgga 250
gccaatgacc catttgccaa taaagacgat cccttctact atgactgga 300
aaacctgcag ctgagcggac tgatctgcgg agggctcctg gccattgctg 350
ggatcgcggc agttctgagt ggcaaatgca aatacaagag cagccagaag 400
cagcacagtc ctgtacctga gaaggccatc ccactcatca ctccaggctc 450
tgccactact tgctgagcac aggactggcc tccagggatg gcctgaagcc 500
taacactggc cccagcacc tcctcccctg ggaggcctta tcctcaagga 550
aggacttctc tccaagggca ggctgttagg cccctttctg atcaggaggc 600
ttctttatga attaaactcg cccaccacc ccctca 636

<210> 200
<211> 89
<212> PRT
<213> Homo Sapien

<400> 200
Met Glu Arg Val Thr Leu Ala Leu Leu Leu Leu Ala Gly Leu Thr
1 5 10 15
Ala Leu Glu Ala Asn Asp Pro Phe Ala Asn Lys Asp Asp Pro Phe
20 25 30
Tyr Tyr Asp Trp Lys Asn Leu Gln Leu Ser Gly Leu Ile Cys Gly
35 40 45
Gly Leu Leu Ala Ile Ala Gly Ile Ala Ala Val Leu Ser Gly Lys
50 55 60

Cys	Lys	Tyr	Lys	Ser	Ser	Gln	Lys	Gln	His	Ser	Pro	Val	Pro	Glu
				65					70					75
Lys	Ala	Ile	Pro	Leu	Ile	Thr	Pro	Gly	Ser	Ala	Thr	Thr	Cys	
				80					85					

<210> 201
 <211> 1734
 <212> DNA
 <213> Homo Sapien

<400> 201
 gtggactctg agaagcccag gcagttgagg acaggagaga gaaggctgca 50
 gaccagagg gagggaggac agggagtcgg aaggaggagg acagaggagg 100
 gcacagagac gcagagcaag ggcggcaagg aggagaccct ggtgggagga 150
 agacactctg gagagagagg gggctgggca gagatgaagt tccagggggcc 200
 cctggcctgc ctctgctgg ccctctgcct gggcagtggg gaggctggcc 250
 ccctgcagag cggagaggaa agcactggga caaatattgg ggaggccctt 300
 ggacatggcc tgggagacgc cctgagcgaa ggggtgggaa aggccattgg 350
 caaagaggcc ggaggggcag ctggctctaa agtcagtgag gcccttggcc 400
 aagggaccag agaagcagtt ggcactggag tcaggcaggt tccaggcttt 450
 ggcgcagcag atgctttggg caacagggtc ggggaagcag cccatgctct 500
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 ggagctccct ggggtcaagg aggcaatgga gggccaccaa actttgggac 800
 caaactcag ggagctgtgg ccagcctgg ctatggttca gtgagagcca 850
 gcaaccagaa tgaagggtgc acgaatcccc caccatctgg ctcaggtgga 900
 ggctccagca actctggggg aggcagcggc tcacagtcgg gcagcagtgg 950
 cagtggcagc aatggtgaca acaacaatgg cagcagcagt ggtggcagca 1000
 gcagtggcag cagcagtggc agcagcagtg gcggcagcag tggcggcagc 1050
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 ggaggtgacg ctggttggtg agtcaatact gtgaactctg agacgtctcc 1400
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 gtttcatcaa ctgggatgcc ataaacaagg accagagaag ctctcgcac 1500
 ccgtgacctc cagacaagga gccaccagat tggatgggag cccccacact 1550
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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1734

<210> 202
 <211> 440
 <212> PRT
 <213> Homo Sapien

<400> 202
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 20 25 30
 Thr Gly Thr Asn Ile Gly Glu Ala Leu Gly His Gly Leu Gly Asp
 35 40 45
 Ala Leu Ser Glu Gly Val Gly Lys Ala Ile Gly Lys Glu Ala Gly
 50 55 60
 Gly Ala Ala Gly Ser Lys Val Ser Glu Ala Leu Gly Gln Gly Thr
 65 70 75
 Arg Glu Ala Val Gly Thr Gly Val Arg Gln Val Pro Gly Phe Gly
 80 85 90
 Ala Ala Asp Ala Leu Gly Asn Arg Val Gly Glu Ala Ala His Ala
 95 100 105
 Leu Gly Asn Thr Gly His Glu Ile Gly Arg Gln Ala Glu Asp Val
 110 115 120
 Ile Arg His Gly Ala Asp Ala Val Arg Gly Ser Trp Gln Gly Val
 125 130 135
 Pro Gly His Ser Gly Ala Trp Glu Thr Ser Gly Gly His Gly Ile

	140		145		150
Phe Gly Ser Gln Gly Gly Leu Gly Gly Gln Gly Gln Gly Asn Pro	155		160		165
Gly Gly Leu Gly Thr Pro Trp Val His Gly Tyr Pro Gly Asn Ser	170		175		180
Ala Gly Ser Phe Gly Met Asn Pro Gln Gly Ala Pro Trp Gly Gln	185		190		195
Gly Gly Asn Gly Gly Pro Pro Asn Phe Gly Thr Asn Thr Gln Gly	200		205		210
Ala Val Ala Gln Pro Gly Tyr Gly Ser Val Arg Ala Ser Asn Gln	215		220		225
Asn Glu Gly Cys Thr Asn Pro Pro Pro Ser Gly Ser Gly Gly Gly	230		235		240
Ser Ser Asn Ser Gly Gly Gly Ser Gly Ser Gln Ser Gly Ser Ser	245		250		255
Gly Ser Gly Ser Asn Gly Asp Asn Asn Asn Gly Ser Ser Ser Gly	260		265		270
Gly Ser Ser Ser Gly Ser Ser Ser Gly Ser Ser Ser Gly Gly Ser	275		280		285
Ser Gly Gly Ser Ser Gly Gly Ser Ser Gly Asn Ser Gly Gly Ser	290		295		300
Arg Gly Asp Ser Gly Ser Glu Ser Ser Trp Gly Ser Ser Thr Gly	305		310		315
Ser Ser Ser Gly Asn His Gly Gly Ser Gly Gly Gly Asn Gly His	320		325		330
Lys Pro Gly Cys Glu Lys Pro Gly Asn Glu Ala Arg Gly Ser Gly	335		340		345
Glu Ser Gly Ile Gln Gly Phe Arg Gly Gln Gly Val Ser Ser Asn	350		355		360
Met Arg Glu Ile Ser Lys Glu Gly Asn Arg Leu Leu Gly Gly Ser	365		370		375
Gly Asp Asn Tyr Arg Gly Gln Gly Ser Ser Trp Gly Ser Gly Gly	380		385		390
Gly Asp Ala Val Gly Gly Val Asn Thr Val Asn Ser Glu Thr Ser	395		400		405
Pro Gly Met Phe Asn Phe Asp Thr Phe Trp Lys Asn Phe Lys Ser	410		415		420
Lys Leu Gly Phe Ile Asn Trp Asp Ala Ile Asn Lys Asp Gln Arg	425		430		435

Ser Ser Arg Ile Pro
440

<210> 203
<211> 1676
<212> DNA
<213> Homo Sapien

<400> 203
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actcctgctg ctggttgtgg gctcctggct actcgccgc atcctggctt 150
ggacctatgc cttctataac aactgccgc ggctccagtg tttcccacag 200
ccccaaaac ggaactggtt ttggggtcac ctgggcctga tcaactctac 250
agaggagggc ttgaaggact cgaccagat gtcggccacc tattcccagg 300
gctttacggg atggctgggt cccatcatcc ccttcatcgt tttatgccac 350
cctgacacca tccggtctat caccaatgcc tcagctgcca ttgcacccaa 400
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gccttccatt tcaacatcct gaagtcctat ataacgatct tcaacaagag 550
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cagaaatgca tcttcagctt tgacagccat tgtcaggaga ggcccagtga 700
atatattgcc accatcttgg agctcagtgc ccttgtagag aaaagaagcc 750
agcatatcct ccagcacatg gactttctgt attacctctc ccatgacggg 800
cggcgcttcc acagggcctg ccgcctgggt catgacttca cagacgctgt 850
catccgggag cggcgctgca cctccccac tcagggtatt gatgattttt 900
tcaaagacaa agccaagtcc aagactttgg atttcattga tgtgcttctg 950
ctgagcaagg atgaagatgg gaaggcattg tcagatgagg atataagagc 1000
agaggctgac accttcatgt ttggaggcca tgacaccacg gccagtggcc 1050
tctcctgggt cctgtacaac cttgcgaggc acccagaata ccaggagcgc 1100
tgccgacagg aggtgcaaga gcttctgaag gaccgcatc ctaaagagat 1150
tgaatgggac gacctggccc agctgccctt cctgaccatg tgcgtgaagg 1200
agagcctgag gttacatccc ccagctccct tcatctcccg atgctgcacc 1250

caggacattg ttctcccaga tggccgagtc atccccaag gcattacctg 1300
 cctcatcgat attatagggg tccatcaciaa cccaactgtg tggccggatc 1350
 ctgaggtcta cgacccttc cgctttgacc cagagaacag caaggggagg 1400
 tcacctctgg cttttattcc tttctccgca gggcccagga actgcatcgg 1450
 gcaggcggtc gccatggcgg agatgaaagt ggtcctggcg ttgatgctgc 1500
 tgcacttccg gttcctgcca gaccacactg agccccgcag gaagctggaa 1550
 ttgatcatgc gcgccgaggg cgggctttgg ctgcgggtgg agcccctgaa 1600
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 gtcatgaata aaacggtgct gtcaaa 1676

<210> 204

<211> 524

<212> PRT

<213> Homo Sapien

<400> 204

Met	Ser	Leu	Leu	Ser	Leu	Pro	Trp	Leu	Gly	Leu	Arg	Pro	Val	Ala	1	5	10	15
Met	Ser	Pro	Trp	Leu	Leu	Leu	Leu	Leu	Val	Val	Gly	Ser	Trp	Leu	20	25	30	
Leu	Ala	Arg	Ile	Leu	Ala	Trp	Thr	Tyr	Ala	Phe	Tyr	Asn	Asn	Cys	35	40	45	
Arg	Arg	Leu	Gln	Cys	Phe	Pro	Gln	Pro	Pro	Lys	Arg	Asn	Trp	Phe	50	55	60	
Trp	Gly	His	Leu	Gly	Leu	Ile	Thr	Pro	Thr	Glu	Glu	Gly	Leu	Lys	65	70	75	
Asp	Ser	Thr	Gln	Met	Ser	Ala	Thr	Tyr	Ser	Gln	Gly	Phe	Thr	Val	80	85	90	
Trp	Leu	Gly	Pro	Ile	Ile	Pro	Phe	Ile	Val	Leu	Cys	His	Pro	Asp	95	100	105	
Thr	Ile	Arg	Ser	Ile	Thr	Asn	Ala	Ser	Ala	Ala	Ile	Ala	Pro	Lys	110	115	120	
Asp	Asn	Leu	Phe	Ile	Arg	Phe	Leu	Lys	Pro	Trp	Leu	Gly	Glu	Gly	125	130	135	
Ile	Leu	Leu	Ser	Gly	Gly	Asp	Lys	Trp	Ser	Arg	His	Arg	Arg	Met	140	145	150	
Leu	Thr	Pro	Ala	Phe	His	Phe	Asn	Ile	Leu	Lys	Ser	Tyr	Ile	Thr	155	160	165	
Ile	Phe	Asn	Lys	Ser	Ala	Asn	Ile	Met	Leu	Asp	Lys	Trp	Gln	His				

	170	175	180
Leu Ala Ser Glu Gly Ser Ser Arg Leu Asp Met Phe Glu His Ile	185	190	195
Ser Leu Met Thr Leu Asp Ser Leu Gln Lys Cys Ile Phe Ser Phe	200	205	210
Asp Ser His Cys Gln Glu Arg Pro Ser Glu Tyr Ile Ala Thr Ile	215	220	225
Leu Glu Leu Ser Ala Leu Val Glu Lys Arg Ser Gln His Ile Leu	230	235	240
Gln His Met Asp Phe Leu Tyr Tyr Leu Ser His Asp Gly Arg Arg	245	250	255
Phe His Arg Ala Cys Arg Leu Val His Asp Phe Thr Asp Ala Val	260	265	270
Ile Arg Glu Arg Arg Arg Thr Leu Pro Thr Gln Gly Ile Asp Asp	275	280	285
Phe Phe Lys Asp Lys Ala Lys Ser Lys Thr Leu Asp Phe Ile Asp	290	295	300
Val Leu Leu Leu Ser Lys Asp Glu Asp Gly Lys Ala Leu Ser Asp	305	310	315
Glu Asp Ile Arg Ala Glu Ala Asp Thr Phe Met Phe Gly Gly His	320	325	330
Asp Thr Thr Ala Ser Gly Leu Ser Trp Val Leu Tyr Asn Leu Ala	335	340	345
Arg His Pro Glu Tyr Gln Glu Arg Cys Arg Gln Glu Val Gln Glu	350	355	360
Leu Leu Lys Asp Arg Asp Pro Lys Glu Ile Glu Trp Asp Asp Leu	365	370	375
Ala Gln Leu Pro Phe Leu Thr Met Cys Val Lys Glu Ser Leu Arg	380	385	390
Leu His Pro Pro Ala Pro Phe Ile Ser Arg Cys Cys Thr Gln Asp	395	400	405
Ile Val Leu Pro Asp Gly Arg Val Ile Pro Lys Gly Ile Thr Cys	410	415	420
Leu Ile Asp Ile Ile Gly Val His His Asn Pro Thr Val Trp Pro	425	430	435
Asp Pro Glu Val Tyr Asp Pro Phe Arg Phe Asp Pro Glu Asn Ser	440	445	450
Lys Gly Arg Ser Pro Leu Ala Phe Ile Pro Phe Ser Ala Gly Pro	455	460	465

Arg	Asn	Cys	Ile	Gly	Gln	Ala	Phe	Ala	Met	Ala	Glu	Met	Lys	Val
				470					475					480
Val	Leu	Ala	Leu	Met	Leu	Leu	His	Phe	Arg	Phe	Leu	Pro	Asp	His
				485					490					495
Thr	Glu	Pro	Arg	Arg	Lys	Leu	Glu	Leu	Ile	Met	Arg	Ala	Glu	Gly
				500					505					510
Gly	Leu	Trp	Leu	Arg	Val	Glu	Pro	Leu	Asn	Val	Gly	Leu	Gln	
				515					520					

<210> 205
 <211> 2401
 <212> DNA
 <213> Homo Sapien

<400> 205
 tcccttgaca ggtctggtgg ctggttcggg gtctactgaa ggctgtcttg 50
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 ccttgaggtg tgaacccaca tccctgcccc cagggccacc tgcaggacgc 150
 cgacacctac ccctcagcag acgccggaga gaaatgagta gcaacaaaga 200
 gcagcgggtca gcagtgttcg tgatcctctt tgccctcatc accatcctca 250
 tcctctacag ctccaacagt gccaatgagg tcttccatta cggtccctg 300
 cggggccgta gccgccgacc tgtcaacctc aagaagtgga gcatcactga 350
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 agtgtgtgat tgtcagcagc tccagccacc tgctgggcac caagctgggc 450
 cctgagatcg agcgggctga gtgtacaatc cgcataatg atgcacccac 500
 cactggctac tcagctgatg tgggcaacaa gaccacctac cgcgtcgtgg 550
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 cggacccctg aaaccgtgtt catcttcttg gggccccga gcaagatgca 650
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accgcttcat caccgagaaa aggggtcttct catcgtgggc ccagctgtat 1050
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a 2401

<210> 206
 <211> 299
 <212> PRT
 <213> Homo Sapien

<400> 206
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 1 5 10 15
 Phe Ala Leu Ile Thr Ile Leu Ile Leu Tyr Ser Ser Asn Ser Ala
 20 25 30
 Asn Glu Val Phe His Tyr Gly Ser Leu Arg Gly Arg Ser Arg Arg
 35 40 45
 Pro Val Asn Leu Lys Lys Trp Ser Ile Thr Asp Gly Tyr Val Pro
 50 55 60
 Ile Leu Gly Asn Lys Thr Leu Pro Ser Arg Cys His Gln Cys Val
 65 70 75
 Ile Val Ser Ser Ser Ser His Leu Leu Gly Thr Lys Leu Gly Pro
 80 85 90
 Glu Ile Glu Arg Ala Glu Cys Thr Ile Arg Met Asn Asp Ala Pro
 95 100 105
 Thr Thr Gly Tyr Ser Ala Asp Val Gly Asn Lys Thr Thr Tyr Arg
 110 115 120
 Val Val Ala His Ser Ser Val Phe Arg Val Leu Arg Arg Pro Gln
 125 130 135
 Glu Phe Val Asn Arg Thr Pro Glu Thr Val Phe Ile Phe Trp Gly
 140 145 150
 Pro Pro Ser Lys Met Gln Lys Pro Gln Gly Ser Leu Val Arg Val
 155 160 165
 Ile Gln Arg Ala Gly Leu Val Phe Pro Asn Met Glu Ala Tyr Ala
 170 175 180
 Val Ser Pro Gly Arg Met Arg Gln Phe Asp Asp Leu Phe Arg Gly
 185 190 195
 Glu Thr Gly Lys Asp Arg Glu Lys Ser His Ser Trp Leu Ser Thr
 200 205 210
 Gly Trp Phe Thr Met Val Ile Ala Val Glu Leu Cys Asp His Val
 215 220 225
 His Val Tyr Gly Met Val Pro Pro Asn Tyr Cys Ser Gln Arg Pro
 230 235 240
 Arg Leu Gln Arg Met Pro Tyr His Tyr Tyr Glu Pro Lys Gly Pro
 245 250 255
 Asp Glu Cys Val Thr Tyr Ile Gln Asn Glu His Ser Arg Lys Gly

Asn His His Arg Phe Ile Thr Glu Lys Arg Val Phe Ser Ser Trp
 275 280 285

Ala Gln Leu Tyr Gly Ile Thr Phe Ser His Pro Ser Trp Thr
 290 295

<210> 207
 <211> 2694
 <212> DNA
 <213> Homo Sapien

<400> 207
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 atgtgccctt ccaatataca acaaatactg gccctctttt gttctatttt 200
 ttacatcctt ttcacctatt ccatactgca tagcaagaag attagtggat 250
 gatacagatg ctatgagtaa cgcttgtaag gaacttgcca tctttcttac 300
 aacgggcatt gtcgtgtcag cttttggact ccctattgta tttgccagag 350
 cacatctgat tgagtgggga gcttgtgcac ttgttctcac aggaaacaca 400
 gtcacttttg caactatact aggccttttc ttggtctttg gaagcaatga 450
 cgacttcagc tggcagcagt ggtgaaaaga aattactgaa ctattgtcaa 500
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 gttaatgctg aatggtatag caagcctctt gggggatatt taggtgctcc 600
 cttctcactt ttattgtaag catactattt tcacagagac ttgctgaagg 650
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 ttctgttag gttgattttt tttggaatca atatgcaatg ttaaactt 800
 ttttaatgta atcatttgca ttggttagga attcagaatt ccgccggctc 850
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 actcagtgca aatatagctg catttataacc tcagaggggc caagtgttaa 1050
 tgcccatgcc ctccgttaag ggttggttgg tttactggta gacagatgtt 1100

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 tatttggtat gttgtatata ttacataaaa taacttttca aatatagttt 1500
 aataacactt agaagtgttt acttacctgg aaaataattg ctatgccgta 1550
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 gagttaatgc aaagtagcca agtccagcta tatagcagct tcagaaacat 1850
 acctgaccaa aaaattccca gtaaccaggc atgatcaatt tatagtggtc 1900
 gtttacatct aataattatc aggacttttt tcaggagtgg gttataaaaa 1950
 cattcaagtt ggtctgacag tattttgtta aggataattg tttgtatggt 2000
 tattcagtat acttacataa aaattatttc gccatcagcc aaaactcagt 2050
 aatcatgaca gctgtctgtt gttttatgaa gtttatttct caagaaaatg 2100
 ggaataaatt tgggatttgt tcagcttttt tactaaagat gcctaaagcc 2150
 acaggtttta ttgcctaact taagccatga cttttagata tgagatgacg 2200
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 tgaaagtggc ttgtgggtatt ataatgttca gatttcaaga ggaaggtgca 2300
 ggtacacatg agttagagag ctgggtgagac agttgggaac tctttgtgct 2350
 tgtgatctac tggacttttt ttttgcagga agtgcattct ctggtccttc 2400
 cctattttct gttctggatg tcagtgcagt gcaactgctac tgttttatcc 2450
 acttggccac agactttttc taacagctgc gtattatttc tatatactaa 2500
 ttgcattggc agcattgtgt ctttgacctt gtatactagc ttgacatagt 2550

gctgtctctg atttctaggc tagttacttg agatatgaat tttccataga 2600
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 tgatgaaaca ataaagattt taaatatcta ttttaaaaaa aaaa 2694

<210> 208
 <211> 131
 <212> PRT
 <213> Homo Sapien

<400> 208
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 Ile Gly Leu Met Phe Leu Met Leu Gly Cys Ala Leu Pro Ile Tyr
 20 25 30
 Asn Lys Tyr Trp Pro Leu Phe Val Leu Phe Phe Tyr Ile Leu Ser
 35 40 45
 Pro Ile Pro Tyr Cys Ile Ala Arg Arg Leu Val Asp Asp Thr Asp
 50 55 60
 Ala Met Ser Asn Ala Cys Lys Glu Leu Ala Ile Phe Leu Thr Thr
 65 70 75
 Gly Ile Val Val Ser Ala Phe Gly Leu Pro Ile Val Phe Ala Arg
 80 85 90
 Ala His Leu Ile Glu Trp Gly Ala Cys Ala Leu Val Leu Thr Gly
 95 100 105
 Asn Thr Val Ile Phe Ala Thr Ile Leu Gly Phe Phe Leu Val Phe
 110 115 120
 Gly Ser Asn Asp Asp Phe Ser Trp Gln Gln Trp
 125 130

<210> 209
 <211> 1172
 <212> DNA
 <213> Homo Sapien

<400> 209
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 ccacttgtgt tctctctcct ggtgcagagt tgcaagcaag tttatcagag 100
 tatcgccatg aagttcgtcc cctgcctcct gctggtgacc ttgtcctgcc 150
 tgggggacttt gggtcaggcc ccgaggcaaa agcaaggaag cactggggag 200
 gaattccatt tccagactgg agggagagat tcctgcacta tgcgtcccag 250
 cagcttgggg caaggtgctg gagaagtctg gcttcgcgtc gactgccgca 300
 acacagacca gacctactgg tgtgagtaca gggggcagcc cagcatgtgc 350

caggcttttg ctgctgaccc caaaccttac tggaatcaag ccctgcagga 400
 gctgaggcgc cttcaccatg cgtgccaggg ggccccggtg cttaggccat 450
 ccgtgtgcag ggaggctgga ccccaggccc atatgcagca ggtgacttcc 500
 agcctcaagg gcagcccaga gcccaaccag cagcctgagg ctgggacgcc 550
 atctctgagg cccaaggcca cagtgaaact cacagaagca acacagctgg 600
 gaaaggactc gatggaagag ctgggaaaag ccaaaccac caccgaccc 650
 acagccaaac ctaccagacc tggaccaggg cccggaggga atgaggaagc 700
 aaagaagaag gcctgggaac attgttgga acccttccag gccctgtgcg 750
 cttttctcat cagcttcttc cgagggtgac aggtgaaaga cccctacaga 800
 tctgacctct ccctgacaga caaccatctc tttttatatt atgccgcttt 850
 caatccaacg ttctcacact ggaagaagag agtttctaata cagatgcaac 900
 ggcccaaatt cttgatctgc agcttctctg aagtttgga aagaaacctt 950
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 tgggcccag agtgacaagc atacacaact acttattatc tgtagaagtt 1050
 ttgctttggt gatctgagcc ttctatgaaa gtttaaatat gtaacgcatt 1100
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 agaatgattt cagaaaaaaa aa 1172

<210> 210
 <211> 223
 <212> PRT
 <213> Homo Sapien

<400> 210
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 1 5 10 15
 Gly Thr Leu Gly Gln Ala Pro Arg Gln Lys Gln Gly Ser Thr Gly
 20 25 30
 Glu Glu Phe His Phe Gln Thr Gly Gly Arg Asp Ser Cys Thr Met
 35 40 45
 Arg Pro Ser Ser Leu Gly Gln Gly Ala Gly Glu Val Trp Leu Arg
 50 55 60
 Val Asp Cys Arg Asn Thr Asp Gln Thr Tyr Trp Cys Glu Tyr Arg
 65 70 75
 Gly Gln Pro Ser Met Cys Gln Ala Phe Ala Ala Asp Pro Lys Pro
 80 85 90

Tyr	Trp	Asn	Gln	Ala	Leu	Gln	Glu	Leu	Arg	Arg	Leu	His	His	Ala
				95					100					105
Cys	Gln	Gly	Ala	Pro	Val	Leu	Arg	Pro	Ser	Val	Cys	Arg	Glu	Ala
				110					115					120
Gly	Pro	Gln	Ala	His	Met	Gln	Gln	Val	Thr	Ser	Ser	Leu	Lys	Gly
				125					130					135
Ser	Pro	Glu	Pro	Asn	Gln	Gln	Pro	Glu	Ala	Gly	Thr	Pro	Ser	Leu
				140					145					150
Arg	Pro	Lys	Ala	Thr	Val	Lys	Leu	Thr	Glu	Ala	Thr	Gln	Leu	Gly
				155					160					165
Lys	Asp	Ser	Met	Glu	Glu	Leu	Gly	Lys	Ala	Lys	Pro	Thr	Thr	Arg
				170					175					180
Pro	Thr	Ala	Lys	Pro	Thr	Gln	Pro	Gly	Pro	Arg	Pro	Gly	Gly	Asn
				185					190					195
Glu	Glu	Ala	Lys	Lys	Lys	Ala	Trp	Glu	His	Cys	Trp	Lys	Pro	Phe
				200					205					210
Gln	Ala	Leu	Cys	Ala	Phe	Leu	Ile	Ser	Phe	Phe	Arg	Gly		
				215					220					

<210> 211
 <211> 708
 <212> DNA
 <213> Homo Sapien

<400> 211
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 ccggcgggcg cgttgagttc ccggcggaca agatgggtgtc agtcctggtg 200
 caagaaggtc acgccgtctc agacatgctc ctgccgctgg atggggaact 250
 cgctectggct tcaggagccg gattcggcgt ctcagacgtg ggctcgcacc 300
 tggactgtgg cgcgggcgaa cctgccgtct tccgcgactc tgaccgcttc 350
 tcctggcatg accgcacctg tggcgctctg gggacgaggc acctggcctc 400
 ttcttcgtgg acgccgagcg cgtgccctgc cgccacgacg acgtcttctt 450
 tccgcctagt gcctccttcc gcgtgggggt cggccctggc gctagccccg 500
 tgcggtgtccg cagcatctcg gctctgggcc ggacgttcac gcgcgacgag 550
 gacctggctg ttttctggc gtcccgcgcg ggccgcctac gcttcacg 600
 gccgggcgcg ctgagcgtgg gccccagga ctgcgcggac ccgtcgggct 650

gcgtctgcgg caacgcggag ggcagccgt ggatctgcgc ggccctgctc 700

cagcccct 708

<210> 212

<211> 197

<212> PRT

<213> Homo Sapien

<400> 212

Met	Gly	Val	Leu	Gly	Arg	Val	Leu	Leu	Trp	Leu	Gln	Leu	Cys	Ala
1				5					10					15

Leu	Thr	Gln	Ala	Val	Ser	Lys	Leu	Trp	Val	Pro	Asn	Thr	Asp	Phe
				20					25					30

Asp	Val	Ala	Ala	Asn	Trp	Ser	Gln	Asn	Arg	Thr	Pro	Cys	Ala	Gly
				35					40					45

Gly	Ala	Val	Glu	Phe	Pro	Ala	Asp	Lys	Met	Val	Ser	Val	Leu	Val
				50					55					60

Gln	Glu	Gly	His	Ala	Val	Ser	Asp	Met	Leu	Leu	Pro	Leu	Asp	Gly
				65					70					75

Glu	Leu	Val	Leu	Ala	Ser	Gly	Ala	Gly	Phe	Gly	Val	Ser	Asp	Val
				80					85					90

Gly	Ser	His	Leu	Asp	Cys	Gly	Ala	Gly	Glu	Pro	Ala	Val	Phe	Arg
				95					100					105

Asp	Ser	Asp	Arg	Phe	Ser	Trp	His	Asp	Arg	Thr	Cys	Gly	Ala	Leu
				110					115					120

Gly	Thr	Arg	His	Leu	Ala	Ser	Ser	Ser	Trp	Thr	Pro	Ser	Ala	Cys
				125					130					135

Pro	Ala	Ala	Thr	Thr	Thr	Ser	Ser	Phe	Arg	Leu	Val	Pro	Pro	Ser
				140					145					150

Ala	Trp	Gly	Ser	Ala	Leu	Ala	Leu	Ala	Pro	Cys	Val	Ser	Ala	Ala
				155					160					165

Ser	Arg	Leu	Trp	Ala	Gly	Arg	Ser	Arg	Ala	Thr	Arg	Thr	Trp	Leu
				170					175					180

Phe	Ser	Trp	Arg	Pro	Ala	Arg	Ala	Ala	Tyr	Ala	Ser	Thr	Gly	Arg
				185					190					195

Ala Arg

<210> 213

<211> 644

<212> DNA

<213> Homo Sapien

<400> 213

cgggaggccc aggacaggcc caccctgcgg ggcgggaggc agccggggtg 100
 agggaggtga agaaaccaag acgcagagag gccaaagcccc ttgccttggg 150
 tcacacagcc aaaggaggca gagccagaac tcacaaccag atccagaggc 200
 aacagggaca tggccacctg ggacgaaaag gcagtcaccc gcagggccaa 250
 ggtggctccc gctgagagga tgagcaagtt ctttaaggcac ttcacggctg 300
 tgggagacga ctaccatgcc tggaacatca actacaagaa atgggagaat 350
 gaagaggagg aggaggagga ggagcagcca ccacccacac cagtctcagg 400
 cgaggaaggc agagctgcag cccctgacgt tgccccctgcc cctggccccg 450
 caccaggggc cccccttgac ttcaggggca tgttgaggaa actgttcagc 500
 tcccacaggt ttcaggtcat catcatctgc ttggtggttc tggatgccct 550
 cctggtgctt gctgagctca tcctggacct gaagatcatc cagcccgaca 600
 agaataacta tgctgccatg gtattccact acatgagcat caccatcttg 650
 gtctttttta tgatggagat catctttaa ttatttgtct tccgcctgag 700
 ttctttcacc acaagtttga gatcctggat gcccgctcgtg gtggtggtct 750
 cattcatcct ggacattgtc ctctgttcc aggagcacca gtttgaggct 800
 ctgggcctgc tgattctgct ccggctgtgg cgggtggccc ggatcatcaa 850
 tgggattatc atctcagtta agacacgttc agaacggcaa ctcttaaggt 900
 taaaacagat gaatgtacaa ttggccgcca agattcaaca ccttgagtgc 950
 agctgctctg agaagcccct ggactgatga gtttgctgta tcaacctgta 1000
 aggagaagct ctctccggat ggctatggga atgaaagaat ccgacttcta 1050
 ctctcacaca gccaccgtga aagtcctgga gtaaaatgtg ctgtgtacag 1100
 aagagagaga aggaagcagg ctggcatggt cactgggctg gtgttacgac 1150
 agagaacctg acagtcactg gccagttatc acttcagatt acaaatacaca 1200
 cagagcatct gcctgttttc aatcacaga gaacaaaacc aaaatctata 1250
 aagatattct gaaaatatga cagaatttga caaataaaag cataaacgtg 1300
 taaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa 1337

<210> 216
 <211> 255
 <212> PRT
 <213> Homo Sapien
 <400> 216

Met	Ala	Thr	Trp	Asp	Glu	Lys	Ala	Val	Thr	Arg	Arg	Ala	Lys	Val	1	5	10	15
Ala	Pro	Ala	Glu	Arg	Met	Ser	Lys	Phe	Leu	Arg	His	Phe	Thr	Val	20	25	30	
Val	Gly	Asp	Asp	Tyr	His	Ala	Trp	Asn	Ile	Asn	Tyr	Lys	Lys	Trp	35	40	45	
Glu	Asn	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Gln	Pro	Pro	Pro	Thr	50	55	60	
Pro	Val	Ser	Gly	Glu	Glu	Gly	Arg	Ala	Ala	Ala	Pro	Asp	Val	Ala	65	70	75	
Pro	Ala	Pro	Gly	Pro	Ala	Pro	Arg	Ala	Pro	Leu	Asp	Phe	Arg	Gly	80	85	90	
Met	Leu	Arg	Lys	Leu	Phe	Ser	Ser	His	Arg	Phe	Gln	Val	Ile	Ile	95	100	105	
Ile	Cys	Leu	Val	Val	Leu	Asp	Ala	Leu	Leu	Val	Leu	Ala	Glu	Leu	110	115	120	
Ile	Leu	Asp	Leu	Lys	Ile	Ile	Gln	Pro	Asp	Lys	Asn	Asn	Tyr	Ala	125	130	135	
Ala	Met	Val	Phe	His	Tyr	Met	Ser	Ile	Thr	Ile	Leu	Val	Phe	Phe	140	145	150	
Met	Met	Glu	Ile	Ile	Phe	Lys	Leu	Phe	Val	Phe	Arg	Leu	Ser	Ser	155	160	165	
Phe	Thr	Thr	Ser	Leu	Arg	Ser	Trp	Met	Pro	Val	Val	Val	Val	Val	170	175	180	
Ser	Phe	Ile	Leu	Asp	Ile	Val	Leu	Leu	Phe	Gln	Glu	His	Gln	Phe	185	190	195	
Glu	Ala	Leu	Gly	Leu	Leu	Ile	Leu	Leu	Arg	Leu	Trp	Arg	Val	Ala	200	205	210	
Arg	Ile	Ile	Asn	Gly	Ile	Ile	Ile	Ser	Val	Lys	Thr	Arg	Ser	Glu	215	220	225	
Arg	Gln	Leu	Leu	Arg	Leu	Lys	Gln	Met	Asn	Val	Gln	Leu	Ala	Ala	230	235	240	
Lys	Ile	Gln	His	Leu	Glu	Phe	Ser	Cys	Ser	Glu	Lys	Pro	Leu	Asp	245	250	255	

<210> 217

<211> 1658

<212> DNA

<213> Homo Sapien

<400> 217

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 atttcagga gacactccat cacagtcact actgtcgct cagctgggaa 200
 cattggggag gatggaatcc tgagctgcac ttttgaacct gacatcaaac 250
 tttctgatat cgtgatacaa tggctgaagg aaggtgtttt aggcttggtc 300
 catgagttca aagaaggcaa agatgagctg tcggagcagg atgaaatggt 350
 cagaggccgg acagcagtggt ttgtgatca agtgatagtt ggcaatgcct 400
 ctttgccggt gaaaaacgtg caactcacag atgctggcac ctacaaatgt 450
 tatatcatca cttctaaagg caaggggaat gctaaccttg agtataaaac 500
 tggagccttc agcatgccgg aagtgaatgt ggactataat gccagctcag 550
 agaccttgcg gtgtgagggt ccccgatggt tccccagcc cacagtgggtc 600
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 cagctttgag ctgaactctg agaatgtgac catgaagggt gtgtctgtgc 700
 tctacaatgt tacgatcaac aacacatact cctgtatgat tgaaaatgac 750
 attgccaaag caacagggga tatcaaagt acagaatcgg agatcaaaag 800
 gccgagtcac ctacagctgc taaactcaaa ggcttctctg tgtgtctctt 850
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 ctaaaataat gtgccttggc cacaaaaaag catgcaaagt cattgttaca 950
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 ttctgggagg aaatgaattc atatctagaa gtctggagt agcaaacaag 1050
 agcaagaaac aaaaagaagc caaaagcaga aggctccaat atgaacaaga 1100
 taaatctatc ttcaaagaca tattagaagt tgggaaaata attcatgtga 1150
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 gcatccccag atctcaggga cctccccctg cctgtcacct ggggagtggag 1250
 aggacaggat agtgcagtgt ctttgtctct gaatttttag ttatatgtgc 1300
 tgtaatgttg ctctgaggaa gccctggaa agtctatccc aacatatcca 1350
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 aattgactgc cacttcgcaa ctacggggcg gctgcatttt agtaatgggt 1450
 caaatgattc actttttatg atgcttccaa aggtgccttg gcttctcttc 1500

ccaactgaca aatgccaaag ttgagaaaaa tgatcataat tttagcataa 1550
acagagcagt cggggacacc gattttataa ataaactgag caccttcttt 1600
ttaaacaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1650
aaaaaaaa 1658

<210> 218
<211> 282
<212> PRT
<213> Homo Sapien

<400> 218
Met Ala Ser Leu Gly Gln Ile Leu Phe Trp Ser Ile Ile Ser Ile
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Ile Ile Ile Leu Ala Gly Ala Ile Ala Leu Ile Ile Gly Phe Gly
20 25 30
Ile Ser Gly Arg His Ser Ile Thr Val Thr Thr Val Ala Ser Ala
35 40 45
Gly Asn Ile Gly Glu Asp Gly Ile Leu Ser Cys Thr Phe Glu Pro
50 55 60
Asp Ile Lys Leu Ser Asp Ile Val Ile Gln Trp Leu Lys Glu Gly
65 70 75
Val Leu Gly Leu Val His Glu Phe Lys Glu Gly Lys Asp Glu Leu
80 85 90
Ser Glu Gln Asp Glu Met Phe Arg Gly Arg Thr Ala Val Phe Ala
95 100 105
Asp Gln Val Ile Val Gly Asn Ala Ser Leu Arg Leu Lys Asn Val
110 115 120
Gln Leu Thr Asp Ala Gly Thr Tyr Lys Cys Tyr Ile Ile Thr Ser
125 130 135
Lys Gly Lys Gly Asn Ala Asn Leu Glu Tyr Lys Thr Gly Ala Phe
140 145 150
Ser Met Pro Glu Val Asn Val Asp Tyr Asn Ala Ser Ser Glu Thr
155 160 165
Leu Arg Cys Glu Ala Pro Arg Trp Phe Pro Gln Pro Thr Val Val
170 175 180
Trp Ala Ser Gln Val Asp Gln Gly Ala Asn Phe Ser Glu Val Ser
185 190 195
Asn Thr Ser Phe Glu Leu Asn Ser Glu Asn Val Thr Met Lys Val
200 205 210
Val Ser Val Leu Tyr Asn Val Thr Ile Asn Asn Thr Tyr Ser Cys
215 220 225

Met	Ile	Glu	Asn	Asp	Ile	Ala	Lys	Ala	Thr	Gly	Asp	Ile	Lys	Val
				230					235					240
Thr	Glu	Ser	Glu	Ile	Lys	Arg	Arg	Ser	His	Leu	Gln	Leu	Leu	Asn
				245					250					255
Ser	Lys	Ala	Ser	Leu	Cys	Val	Ser	Ser	Phe	Phe	Ala	Ile	Ser	Trp
				260					265					270
Ala	Leu	Leu	Pro	Leu	Ser	Pro	Tyr	Leu	Met	Leu	Lys			
				275					280					

<210> 219
 <211> 1484
 <212> DNA
 <213> Homo Sapien

<400> 219
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 tgaagcgggc ctccgccggc ctgcagcggg ttcatgagcc gacctgggccc 150
 cagcagttgc tacaggagat gaagaccctc ttcttgaata ctgagtacct 200
 gatgcccttt ctectcaacc agtgtggatc ccttctctat tacctcacct 250
 tggcatcgac agatctgacc ctggctgtgc ccatctgtaa ctctctggct 300
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 aaaacgtaag ttagactact gcgagtgcgg gacgcagctc tgtggatctc 400
 gacataacctg tgtagttcc ttcccagaac ccatctcccc agagtgggtg 450
 aggacacggc cttttcccat cctgcccttt cctctgcagc tgttttgctt 500
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 ctgcctatta tcccaggagc agttgctggc atggtgctca ccgtgatagg 700
 aatttcactc tgcatacaca gctcagtgag taagaccagc gggcaacagt 750
 ctaccctttg agtggggcga acccacttcc agctctgctg cctccaggaa 800
 gccctggggc catgaagtgc tggcagtgag cggatggacc tagcacttcc 850
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aaccctttctg ccccgagcgc tctcttctg ctaacatctc aggctcccag 1050
cccgagccacc attactgtgg cctgatctgg actatcatgg tggcagggttc 1100
catggactgc agaactccag ctgcatggaa agggccagct gcagactttg 1150
agccagaaat gcaaacggga ggcctctggg actcagtcag agcgctttgg 1200
ctgaatgagg ggtggaaccg agggaagaag gtgcgtcgga gtggcagatg 1250
caggaaatga gctgtctatt agccttgccg gccccaccca tgaggtaggc 1300
agaaatcctc actgccagcc cctcttaaac aggtagagag ctgtgagccc 1350
cagccccacc tgactccagc acacctggcg agtagtagct gtcaataaat 1400
ctatgtaaac agacaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1450
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1484

<210> 220
<211> 180
<212> PRT
<213> Homo Sapien

<400> 220
Met Ala Ala Ser Leu Gly Gln Val Leu Ala Leu Val Leu Val Ala
1 5 10 15
Ala Leu Trp Gly Gly Thr Gln Pro Leu Leu Lys Arg Ala Ser Ala
20 25 30
Gly Leu Gln Arg Val His Glu Pro Thr Trp Ala Gln Gln Leu Leu
35 40 45
Gln Glu Met Lys Thr Leu Phe Leu Asn Thr Glu Tyr Leu Met Pro
50 55 60
Phe Leu Leu Asn Gln Cys Gly Ser Leu Leu Tyr Tyr Leu Thr Leu
65 70 75
Ala Ser Thr Asp Leu Thr Leu Ala Val Pro Ile Cys Asn Ser Leu
80 85 90
Ala Ile Ile Phe Thr Leu Ile Val Gly Lys Ala Leu Gly Glu Asp
95 100 105
Ile Gly Gly Lys Arg Lys Leu Asp Tyr Cys Glu Cys Gly Thr Gln
110 115 120
Leu Cys Gly Ser Arg His Thr Cys Val Ser Ser Phe Pro Glu Pro
125 130 135
Ile Ser Pro Glu Trp Val Arg Thr Arg Pro Phe Pro Ile Leu Pro
140 145 150
Phe Pro Leu Gln Leu Phe Cys Phe Leu Val Ala Ile Arg Val Pro
155 160 165

Phe	Pro	Trp	Thr	Val	Trp	Arg	Lys	Thr	Glu	Ala	Gly	Val	Trp	Asp
				170					175					180

<210> 221
 <211> 1164
 <212> DNA
 <213> Homo Sapien

<400> 221
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 cggcctaaga tgccacttct tctcatgtcc caggcttgag gccctgtggt 200
 ccccatcctt gggagaagtc agctccagca ccatgaaggg catcctcggt 250
 gctggtatca ctgcagtgtc tgttgagctc gtagaatctc tgagctgcgt 300
 gcagtgtaat tcatgggaaa aatcctgtgt caacagcatt gcctctgaat 350
 gtccctcaca tgccaacacc agctgtatca gtcctcagc cagctcctct 400
 ctagagacac cagtcagatt ataccagaat atgttctgct cagcggagaa 450
 ctgcagtgtg gagacacaca ttacagcctt cactgtccac gtgtctgtg 500
 aagaacactt tcatttttga agccagtgtc gccaaggaaa ggaatgcagc 550
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 aagaatgaca ttgagtctaa gagtctcgtg ctgaaaggct gttccaacgt 750
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 agcaccctt ggggtgtga caccctctt cctgctctg ccccgtttaa 1050
 ctgcccagta agtgggagtc acaggtctcc aggcaatgcc gacagctgcc 1100
 ttgttcttca ttattaaagc actggttcat tcaactgcaa aaaaaaaaaa 1150
 aaaaaaaaaa aaaa 1164

<210> 222

10052500

<211> 237
 <212> PRT
 <213> Homo Sapien

<400> 222

Met	Lys	Gly	Ile	Leu	Val	Ala	Gly	Ile	Thr	Ala	Val	Leu	Val	Ala	
1				5					10					15	
Ala	Val	Glu	Ser	Leu	Ser	Cys	Val	Gln	Cys	Asn	Ser	Trp	Glu	Lys	
				20					25					30	
Ser	Cys	Val	Asn	Ser	Ile	Ala	Ser	Glu	Cys	Pro	Ser	His	Ala	Asn	
				35					40					45	
Thr	Ser	Cys	Ile	Ser	Ser	Ser	Ala	Ser	Ser	Ser	Leu	Glu	Thr	Pro	
				50					55					60	
Val	Arg	Leu	Tyr	Gln	Asn	Met	Phe	Cys	Ser	Ala	Glu	Asn	Cys	Ser	
				65					70					75	
Glu	Glu	Thr	His	Ile	Thr	Ala	Phe	Thr	Val	His	Val	Ser	Ala	Glu	
				80					85					90	
Glu	His	Phe	His	Phe	Val	Ser	Gln	Cys	Cys	Gln	Gly	Lys	Glu	Cys	
				95					100					105	
Ser	Asn	Thr	Ser	Asp	Ala	Leu	Asp	Pro	Pro	Leu	Lys	Asn	Val	Ser	
				110					115					120	
Ser	Asn	Ala	Glu	Cys	Pro	Ala	Cys	Tyr	Glu	Ser	Asn	Gly	Thr	Ser	
				125					130					135	
Cys	Arg	Gly	Lys	Pro	Trp	Lys	Cys	Tyr	Glu	Glu	Glu	Gln	Cys	Val	
				140					145					150	
Phe	Leu	Val	Ala	Glu	Leu	Lys	Asn	Asp	Ile	Glu	Ser	Lys	Ser	Leu	
				155					160					165	
Val	Leu	Lys	Gly	Cys	Ser	Asn	Val	Ser	Asn	Ala	Thr	Cys	Gln	Phe	
				170					175					180	
Leu	Ser	Gly	Glu	Asn	Lys	Thr	Leu	Gly	Gly	Val	Ile	Phe	Arg	Lys	
				185					190					195	
Phe	Glu	Cys	Ala	Asn	Val	Asn	Ser	Leu	Thr	Pro	Thr	Ser	Ala	Pro	
				200					205					210	
Thr	Thr	Ser	His	Asn	Val	Gly	Ser	Lys	Ala	Ser	Leu	Tyr	Leu	Leu	
				215					220					225	
Ala	Leu	Ala	Ser	Leu	Leu	Leu	Arg	Gly	Leu	Leu	Pro				
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<210> 223
 <211> 1245
 <212> DNA
 <213> Homo Sapien

<400> 223
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ccagcccat ggtccccgcc gccggcgcg tgctgtgggt cctgctgctg 150
aatctgggtc cccggggcgc gggggcccaa ggctgaccc agactccgac 200
cgaaatgcag cgggtcagtt tacgctttgg gggcccatg acccgagct 250
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<210> 224
<211> 341
<212> PRT
<213> Homo Sapien

<400> 224
Met Val Pro Ala Ala Gly Ala Leu Leu Trp Val Leu Leu Leu Asn

1	5	10	15
Leu Gly Pro Arg	Ala Ala Gly Ala Gln Gly Leu Thr Gln Thr Pro	20	25 30
Thr Glu Met Gln Arg Val Ser Leu Arg Phe Gly Gly Pro Met Thr	35	40	45
Arg Ser Tyr Arg Ser Thr Ala Arg Thr Gly Leu Pro Arg Lys Thr	50	55	60
Arg Ile Ile Leu Glu Asp Glu Asn Asp Ala Met Ala Asp Ala Asp	65	70	75
Arg Leu Ala Gly Pro Ala Ala Ala Glu Leu Leu Ala Ala Thr Val	80	85	90
Ser Thr Gly Phe Ser Arg Ser Ser Ala Ile Asn Glu Glu Asp Gly	95	100	105
Ser Ser Glu Glu Gly Val Val Ile Asn Ala Gly Lys Asp Ser Thr	110	115	120
Ser Arg Glu Leu Pro Ser Ala Thr Pro Asn Thr Ala Gly Ser Ser	125	130	135
Ser Thr Arg Phe Ile Ala Asn Ser Gln Glu Pro Glu Ile Arg Leu	140	145	150
Thr Ser Ser Leu Pro Arg Ser Pro Gly Arg Ser Thr Glu Asp Leu	155	160	165
Pro Gly Ser Gln Ala Thr Leu Ser Gln Trp Ser Thr Pro Gly Ser	170	175	180
Thr Pro Ser Arg Trp Pro Ser Pro Ser Pro Thr Ala Met Pro Ser	185	190	195
Pro Glu Asp Leu Arg Leu Val Leu Met Pro Trp Gly Pro Trp His	200	205	210
Cys His Cys Lys Ser Gly Thr Met Ser Arg Ser Arg Ser Gly Lys	215	220	225
Leu His Gly Leu Ser Gly Arg Leu Arg Val Gly Ala Leu Ser Gln	230	235	240
Leu Arg Thr Glu His Lys Pro Cys Thr Tyr Gln Gln Cys Pro Cys	245	250	255
Asn Arg Leu Arg Glu Glu Cys Pro Leu Asp Thr Ser Leu Cys Thr	260	265	270
Asp Thr Asn Cys Ala Ser Gln Ser Thr Thr Ser Thr Arg Thr Thr	275	280	285
Thr Thr Pro Phe Pro Thr Ile His Leu Arg Ser Ser Pro Ser Leu	290	295	300

Pro	Pro	Ala	Ser	Pro	Cys	Pro	Ala	Leu	Ala	Phe	Trp	Lys	Arg	Val
				305					310					315
Arg	Ile	Gly	Leu	Glu	Asp	Ile	Trp	Asn	Ser	Leu	Ser	Ser	Val	Phe
				320					325					330
Thr	Glu	Met	Gln	Pro	Ile	Asp	Arg	Asn	Gln	Arg				
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<210> 225
 <211> 2692
 <212> DNA
 <213> Homo Sapien

<400> 225
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gcttaataaaa tcaattccaa gcctcaaaaa aaaaaaaaaa aa 2692

<210> 226
<211> 320
<212> PRT
<213> Homo Sapien

<400> 226
Met Ala Gly Leu Ala Ala Arg Leu Val Leu Leu Ala Gly Ala Ala
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Ala Leu Ala Ser Gly Ser Gln Gly Asp Arg Glu Pro Val Tyr Arg
20 25 30
Asp Cys Val Leu Gln Cys Glu Glu Gln Asn Cys Ser Gly Gly Ala
35 40 45
Leu Asn His Phe Arg Ser Arg Gln Pro Ile Tyr Met Ser Leu Ala
50 55 60
Gly Trp Thr Cys Arg Asp Asp Cys Lys Tyr Glu Cys Met Trp Val
65 70 75
Thr Val Gly Leu Tyr Leu Gln Glu Gly His Lys Val Pro Gln Phe
80 85 90
His Gly Lys Trp Pro Phe Ser Arg Phe Leu Phe Phe Gln Glu Pro
95 100 105
Ala Ser Ala Val Ala Ser Phe Leu Asn Gly Leu Ala Ser Leu Val
110 115 120
Met Leu Cys Arg Tyr Arg Thr Phe Val Pro Ala Ser Ser Pro Met
125 130 135
Tyr His Thr Cys Val Ala Phe Ala Trp Val Ser Leu Asn Ala Trp
140 145 150
Phe Trp Ser Thr Val Phe His Thr Arg Asp Thr Asp Leu Thr Glu
155 160 165
Lys Met Asp Tyr Phe Cys Ala Ser Thr Val Ile Leu His Ser Ile
170 175 180
Tyr Leu Cys Cys Val Arg Thr Val Gly Leu Gln His Pro Ala Val
185 190 195
Val Ser Ala Phe Arg Ala Leu Leu Leu Leu Met Leu Thr Val His
200 205 210
Val Ser Tyr Leu Ser Leu Ile Arg Phe Asp Tyr Gly Tyr Asn Leu
215 220 225
Val Ala Asn Val Ala Ile Gly Leu Val Asn Val Val Trp Trp Leu

230	235	240
Ala Trp Cys Leu Trp Asn Gln Arg Arg	Leu Pro His Val Arg Lys	
245	250	255
Cys Val Val Val Val Leu Leu Leu Gln	Gly Leu Ser Leu Leu Glu	
260	265	270
Leu Leu Asp Phe Pro Pro Leu Phe Trp	Val Leu Asp Ala His Ala	
275	280	285
Ile Trp His Ile Ser Thr Ile Pro Val	His Val Leu Phe Phe Ser	
290	295	300
Phe Leu Glu Asp Asp Ser Leu Tyr Leu	Leu Lys Glu Ser Glu Asp	
305	310	315
Lys Phe Lys Leu Asp		
320		

<210> 227
 <211> 2136
 <212> DNA
 <213> Homo Sapien

<400> 227
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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa 2136

<210> 228
 <211> 247
 <212> PRT
 <213> Homo Sapien

<400> 228

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Pro	Ala	Phe	Ala	Leu	Phe	Leu	Ile	Thr	Val	Ala	Gly	Asp	Pro	Leu
				20					25					30
Arg	Val	Ile	Ile	Leu	Val	Ala	Gly	Ala	Phe	Phe	Trp	Leu	Val	Ser
				35					40					45
Leu	Leu	Leu	Ala	Ser	Val	Val	Trp	Phe	Ile	Leu	Val	His	Val	Thr
				50					55					60
Asp	Arg	Ser	Asp	Ala	Arg	Leu	Gln	Tyr	Gly	Leu	Leu	Ile	Phe	Gly
				65					70					75
Ala	Ala	Val	Ser	Val	Leu	Leu	Gln	Glu	Val	Phe	Arg	Phe	Ala	Tyr
				80					85					90
Tyr	Lys	Leu	Leu	Lys	Lys	Ala	Asp	Glu	Gly	Leu	Ala	Ser	Leu	Ser
				95					100					105
Glu	Asp	Gly	Arg	Ser	Pro	Ile	Ser	Ile	Arg	Gln	Met	Ala	Tyr	Val
				110					115					120
Ser	Gly	Leu	Ser	Phe	Gly	Ile	Ile	Ser	Gly	Val	Phe	Ser	Val	Ile
				125					130					135
Asn	Ile	Leu	Ala	Asp	Ala	Leu	Gly	Pro	Gly	Val	Val	Gly	Ile	His
				140					145					150
Gly	Asp	Ser	Pro	Tyr	Tyr	Phe	Leu	Thr	Ser	Ala	Phe	Leu	Thr	Ala
				155					160					165
Ala	Ile	Ile	Leu	Leu	His	Thr	Phe	Trp	Gly	Val	Val	Phe	Phe	Asp
				170					175					180
Ala	Cys	Glu	Arg	Arg	Arg	Tyr	Trp	Ala	Leu	Gly	Leu	Val	Val	Gly
				185					190					195
Ser	His	Leu	Leu	Thr	Ser	Gly	Leu	Thr	Phe	Leu	Asn	Pro	Trp	Tyr
				200					205					210
Glu	Ala	Ser	Leu	Leu	Pro	Ile	Tyr	Ala	Val	Thr	Val	Ser	Met	Gly
				215					220					225
Leu	Trp	Ala	Phe	Ile	Thr	Ala	Gly	Gly	Ser	Leu	Arg	Ser	Ile	Gln
				230					235					240
Arg	Ser	Leu	Leu	Cys	Lys	Asp								
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<210> 229

<211> 1661

<212> DNA

<213> Homo Sapien

<220>

<221> unsure
 <222> 678
 <223> unknown base

<400> 229

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cacatggaaa a 1661

<210> 230

<211> 487

<212> PRT

<213> Homo Sapien

<220>

<221> unsure

<222> 196, 386

<223> unknown amino acid

<400> 230

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Tyr	Leu	Arg	Arg	Leu	Leu	Leu	Leu	Leu	Leu	Leu	Leu	Leu	Leu	Arg	20	25	30	
Gln	Pro	Val	Thr	Arg	Ala	Glu	Thr	Thr	Pro	Gly	Ala	Pro	Arg	Ala	35	40	45	
Leu	Ser	Thr	Leu	Gly	Ser	Pro	Ser	Leu	Phe	Thr	Thr	Pro	Gly	Val	50	55	60	
Pro	Ser	Ala	Leu	Thr	Thr	Pro	Gly	Leu	Thr	Thr	Pro	Gly	Thr	Pro	65	70	75	
Lys	Thr	Leu	Asp	Leu	Arg	Gly	Arg	Ala	Gln	Ala	Leu	Met	Arg	Ser	80	85	90	
Phe	Pro	Leu	Val	Asp	Gly	His	Asn	Asp	Leu	Pro	Gln	Val	Leu	Arg	95	100	105	
Gln	Arg	Tyr	Lys	Asn	Val	Leu	Gln	Asp	Val	Asn	Leu	Arg	Asn	Phe	110	115	120	
Ser	His	Gly	Gln	Thr	Ser	Leu	Asp	Arg	Leu	Arg	Asp	Gly	Leu	Val	125	130	135	
Gly	Ala	Gln	Phe	Trp	Ser	Ala	Ser	Val	Ser	Cys	Gln	Ser	Gln	Asp	140	145	150	
Gln	Thr	Ala	Val	Arg	Leu	Ala	Leu	Glu	Gln	Ile	Asp	Leu	Ile	His	155	160	165	

Arg	Met	Cys	Ala	Ser	Tyr	Ser	Glu	Leu	Glu	Leu	Val	Thr	Ser	Ala	
				170					175					180	
Glu	Gly	Leu	Asn	Ser	Ser	Gln	Lys	Leu	Ala	Cys	Leu	Ile	Gly	Val	
				185					190					195	
Xaa	Gly	Gly	His	Ser	Leu	Asp	Ser	Ser	Leu	Ser	Val	Leu	Arg	Ser	
				200					205					210	
Phe	Tyr	Val	Leu	Gly	Val	Arg	Tyr	Leu	Thr	Leu	Thr	Phe	Thr	Cys	
				215					220					225	
Ser	Thr	Pro	Trp	Ala	Glu	Ser	Ser	Thr	Lys	Phe	Arg	His	His	Met	
				230					235					240	
Tyr	Thr	Asn	Val	Ser	Gly	Leu	Thr	Ser	Phe	Gly	Glu	Lys	Val	Val	
				245					250					255	
Glu	Glu	Leu	Asn	Arg	Leu	Gly	Met	Met	Ile	Asp	Leu	Ser	Tyr	Ala	
				260					265					270	
Ser	Asp	Thr	Leu	Ile	Arg	Arg	Val	Leu	Glu	Val	Ser	Gln	Ala	Pro	
				275					280					285	
Val	Ile	Phe	Ser	His	Ser	Ala	Ala	Arg	Ala	Val	Cys	Asp	Asn	Leu	
				290					295					300	
Leu	Asn	Val	Pro	Asp	Asp	Ile	Leu	Gln	Leu	Leu	Lys	Asn	Gly	Gly	
				305					310					315	
Ile	Val	Met	Val	Thr	Leu	Ser	Met	Gly	Val	Leu	Gln	Cys	Asn	Leu	
				320					325					330	
Leu	Ala	Asn	Val	Ser	Thr	Val	Ala	Asp	His	Phe	Asp	His	Ile	Arg	
				335					340					345	
Ala	Val	Ile	Gly	Ser	Glu	Phe	Ile	Gly	Ile	Gly	Gly	Asn	Tyr	Asp	
				350					355					360	
Gly	Thr	Gly	Arg	Phe	Pro	Gln	Gly	Leu	Glu	Asp	Val	Ser	Thr	Tyr	
				365					370					375	
Pro	Val	Leu	Ile	Glu	Glu	Leu	Leu	Ser	Arg	Xaa	Trp	Ser	Glu	Glu	
				380					385					390	
Glu	Leu	Gln	Gly	Val	Leu	Arg	Gly	Asn	Leu	Leu	Arg	Val	Phe	Arg	
				395					400					405	
Gln	Val	Glu	Lys	Val	Arg	Glu	Glu	Ser	Arg	Ala	Gln	Ser	Pro	Val	
				410					415					420	
Glu	Ala	Glu	Phe	Pro	Tyr	Gly	Gln	Leu	Ser	Thr	Ser	Cys	His	Ser	
				425					430					435	
His	Leu	Val	Pro	Gln	Asn	Gly	His	Gln	Ala	Thr	His	Leu	Glu	Val	
				440					445					450	
Thr	Lys	Gln	Pro	Thr	Asn	Arg	Val	Pro	Trp	Arg	Ser	Ser	Asn	Ala	

	455		460		465
Ser Pro Tyr Leu Val Pro Gly Leu Val Ala Ala Ala Thr Ile Pro					
	470		475		480
Thr Phe Thr Gln Trp Leu Cys					
	485				

<210> 231
 <211> 1095
 <212> DNA
 <213> Homo Sapien

<400> 231
 gctctggccg gccccggcga ttggtcaccg cccgctaggg gacagccctg 50
 gcctcctctg attggcaagc gctggccacc tccccacacc ccttgccaac 100
 gctcccctag tggagaaaag gagtagctat tagccaattc ggcagggccc 150
 gctttttaga agcttgattt cctttgaaga tgaaagacta gcggaagctc 200
 tgctcttttc ccagtgggc gaggggaactc ggggcgattg gctgggaact 250
 gtatccacc aaatgtcacc gatttcttcc tatgcaggaa atgagcagac 300
 ccatcaataa gaaatttctc agcctggccg aaaatggttg gccccacgaa 350
 gccacgacaa ctggaggcaa agagggttgc tcaacgcccc gcctcattgg 400
 aaaaccaa atcagatctggg acctatatag cgtggcgagg gcggggcgat 450
 gattgtcgcg ctgcgacca ctgcagctgc gcacagtcgc atttctttcc 500
 ccgcccctga gacctgcag caccatctgt catggcggtt gggctgtttg 550
 gtttgagcgc tcgccgtctt ttggcggcag cggcgacgcg agggctcccg 600
 gccgcccgcg tccgctggga atctagcttc tccaggactg tggctgcccc 650
 gtccgctgtg gcgggaaagc ggccccaga accgaccaca ccgtggcaag 700
 aggaccaga acccgaggac gaaaacttgt atgagaagaa cccagactcc 750
 catggttatg acaaggacc cgttttggac gtctggaaca tgcgacttgt 800
 cttcttcttt ggcgctctca tcatcctggt ccttggcagc acctttgtgg 850
 cctatctgcc tgactacagg atgaaagagt ggtcccgcg cgaagctgag 900
 aggcttgtga aataccgaga ggccaatggc cttcccatca tggaatccaa 950
 ctgcttcgac cccagcaaga tccagctgcc agaggatgag tgaccagttg 1000
 ctaagtgggg ctcaagaagc accgccttcc ccaccccctg cctgccattc 1050
 tgacctcttc tcagagcacc taattaaagg ggctgaaagt ctgaa 1095

<210> 232
 <211> 153
 <212> PRT
 <213> Homo Sapien

<400> 232
 Met Ala Ala Gly Leu Phe Gly Leu Ser Ala Arg Arg Leu Leu Ala
 1 5 10 15
 Ala Ala Ala Thr Arg Gly Leu Pro Ala Ala Arg Val Arg Trp Glu
 20 25 30
 Ser Ser Phe Ser Arg Thr Val Val Ala Pro Ser Ala Val Ala Gly
 35 40 45
 Lys Arg Pro Pro Glu Pro Thr Thr Pro Trp Gln Glu Asp Pro Glu
 50 55 60
 Pro Glu Asp Glu Asn Leu Tyr Glu Lys Asn Pro Asp Ser His Gly
 65 70 75
 Tyr Asp Lys Asp Pro Val Leu Asp Val Trp Asn Met Arg Leu Val
 80 85 90
 Phe Phe Phe Gly Val Ser Ile Ile Leu Val Leu Gly Ser Thr Phe
 95 100 105
 Val Ala Tyr Leu Pro Asp Tyr Arg Met Lys Glu Trp Ser Arg Arg
 110 115 120
 Glu Ala Glu Arg Leu Val Lys Tyr Arg Glu Ala Asn Gly Leu Pro
 125 130 135
 Ile Met Glu Ser Asn Cys Phe Asp Pro Ser Lys Ile Gln Leu Pro
 140 145 150
 Glu Asp Glu

<210> 233
 <211> 2162
 <212> DNA
 <213> Homo Sapien

<400> 233
 gcggcgggcta tgccgcttgc tctgctcgtc ctgttgctcc tggggcccg 50
 cggtcgtgtgc cttgcagaac cccacgcga cagcctgcgg gaggaacttg 100
 tcataccccc gctgccttcc ggggacgtag ccgccacatt ccagttccgc 150
 acgcgctggg attcggagct tcagcgggaa ggagtgtccc attacaggct 200
 ctttcccaaa gccctggggc agctgatctc caagtattct ctacgggagc 250
 tgcacctgtc attcacacaa ggcttttggg ggacccgata ctggggggcca 300
 cccttctctgc agggcccatc aggtgcagag ctgtgggtct ggtccaaga 350

[illegible]

tgccacttgc tctcctcaga gttggctttt gaaccaaagt gccctggacc 1850
 aggtcagggc ctacagctgt gttgtccagt acaggagcca cgagccaaat 1900
 gtggcatttg aatttgaatt aacttagaaa ttcatttcct cacctgtagt 1950
 ggccacctct atattgaggt gctcaataag caaaagtggc cggcggctgc 2000
 tgtattggac agcacagaaa aagatttcca tcaccacaga aaggcggcgt 2050
 ggccagcactg gcccaaggtga tgggggtgtgc tacacagtgt atgtcactgt 2100
 gtagtggatg gagtttactg tttgtggaat aaaaacggcgt gtttccgtgg 2150
 aaaaaaaaaa aa 2162

<210> 234
 <211> 574
 <212> PRT
 <213> Homo Sapien

<400> 234
 Met Pro Leu Ala Leu Leu Val Leu Leu Leu Leu Gly Pro Gly Gly
 1 5 10 15
 Trp Cys Leu Ala Glu Pro Pro Arg Asp Ser Leu Arg Glu Glu Leu
 20 25 30
 Val Ile Thr Pro Leu Pro Ser Gly Asp Val Ala Ala Thr Phe Gln
 35 40 45
 Phe Arg Thr Arg Trp Asp Ser Glu Leu Gln Arg Glu Gly Val Ser
 50 55 60
 His Tyr Arg Leu Phe Pro Lys Ala Leu Gly Gln Leu Ile Ser Lys
 65 70 75
 Tyr Ser Leu Arg Glu Leu His Leu Ser Phe Thr Gln Gly Phe Trp
 80 85 90
 Arg Thr Arg Tyr Trp Gly Pro Pro Phe Leu Gln Ala Pro Ser Gly
 95 100 105
 Ala Glu Leu Trp Val Trp Phe Gln Asp Thr Val Thr Asp Val Asp
 110 115 120
 Lys Ser Trp Lys Glu Leu Ser Asn Val Leu Ser Gly Ile Phe Cys
 125 130 135
 Ala Ser Leu Asn Phe Ile Asp Ser Thr Asn Thr Val Thr Pro Thr
 140 145 150
 Ala Ser Phe Lys Pro Leu Gly Leu Ala Asn Asp Thr Asp His Tyr
 155 160 165
 Phe Leu Arg Tyr Ala Val Leu Pro Arg Glu Val Val Cys Thr Glu
 170 175 180

Asn	Leu	Thr	Pro	Trp	Lys	Lys	Leu	Leu	Pro	Cys	Ser	Ser	Lys	Ala	185	190	195
Gly	Leu	Ser	Val	Leu	Leu	Lys	Ala	Asp	Arg	Leu	Phe	His	Thr	Ser	200	205	210
Tyr	His	Ser	Gln	Ala	Val	His	Ile	Arg	Pro	Val	Cys	Arg	Asn	Ala	215	220	225
Arg	Cys	Thr	Ser	Ile	Ser	Trp	Glu	Leu	Arg	Gln	Thr	Leu	Ser	Val	230	235	240
Val	Phe	Asp	Ala	Phe	Ile	Thr	Gly	Gln	Gly	Lys	Lys	Asp	Trp	Ser	245	250	255
Leu	Phe	Arg	Met	Phe	Ser	Arg	Thr	Leu	Thr	Glu	Pro	Cys	Pro	Leu	260	265	270
Ala	Ser	Glu	Ser	Arg	Val	Tyr	Val	Asp	Ile	Thr	Thr	Tyr	Asn	Gln	275	280	285
Asp	Asn	Glu	Thr	Leu	Glu	Val	His	Pro	Pro	Pro	Thr	Thr	Thr	Tyr	290	295	300
Gln	Asp	Val	Ile	Leu	Gly	Thr	Arg	Lys	Thr	Tyr	Ala	Ile	Tyr	Asp	305	310	315
Leu	Leu	Asp	Thr	Ala	Met	Ile	Asn	Asn	Ser	Arg	Asn	Leu	Asn	Ile	320	325	330
Gln	Leu	Lys	Trp	Lys	Arg	Pro	Pro	Glu	Asn	Glu	Ala	Pro	Pro	Val	335	340	345
Pro	Phe	Leu	His	Ala	Gln	Arg	Tyr	Val	Ser	Gly	Tyr	Gly	Leu	Gln	350	355	360
Lys	Gly	Glu	Leu	Ser	Thr	Leu	Leu	Tyr	Asn	Thr	His	Pro	Tyr	Arg	365	370	375
Ala	Phe	Pro	Val	Leu	Leu	Leu	Asp	Thr	Val	Pro	Trp	Tyr	Leu	Arg	380	385	390
Leu	Tyr	Val	His	Thr	Leu	Thr	Ile	Thr	Ser	Lys	Gly	Lys	Glu	Asn	395	400	405
Lys	Pro	Ser	Tyr	Ile	His	Tyr	Gln	Pro	Ala	Gln	Asp	Arg	Leu	Gln	410	415	420
Pro	His	Leu	Leu	Glu	Met	Leu	Ile	Gln	Leu	Pro	Ala	Asn	Ser	Val	425	430	435
Thr	Lys	Val	Ser	Ile	Gln	Phe	Glu	Arg	Ala	Leu	Leu	Lys	Trp	Thr	440	445	450
Glu	Tyr	Thr	Pro	Asp	Pro	Asn	His	Gly	Phe	Tyr	Val	Ser	Pro	Ser	455	460	465
Val	Leu	Ser	Ala	Leu	Val	Pro	Ser	Met	Val	Ala	Ala	Lys	Pro	Val			

470	475	480
Asp Trp Glu Glu Ser Pro Leu Phe Asn	Ser Leu Phe Pro Val Ser	
485	490	495
Asp Gly Ser Asn Tyr Phe Val Arg Leu	Tyr Thr Glu Pro Leu Leu	
500	505	510
Val Asn Leu Pro Thr Pro Asp Phe Ser	Met Pro Tyr Asn Val Ile	
515	520	525
Cys Leu Thr Cys Thr Val Val Ala Val	Cys Tyr Gly Ser Phe Tyr	
530	535	540
Asn Leu Leu Thr Arg Thr Phe His Ile	Glu Glu Pro Arg Thr Gly	
545	550	555
Gly Leu Ala Lys Arg Leu Ala Asn Leu	Ile Arg Arg Ala Arg Gly	
560	565	570
Val Pro Pro Leu		

<210> 235
 <211> 1617
 <212> DNA
 <213> Homo Sapien

<400> 235
 tgacgtcaga atcaccatgg ccagctatcc ttaccggcag ggctgcccag 50
 gagctgcagg acaagcacca ggagcccctc cgggtagcta ctaccctgga 100
 ccccccaata gtggagggca gtatgtagt gggctacccc ctggtggtgg 150
 ttatgggggt cctgcccctg gagggcctta tggaccacca gctggtggag 200
 ggccctatgg acaccccaat cctgggatgt tcccctctgg aactccagga 250
 ggaccatatg gcggtgcagc tcccgggggc ccctatggtc agccacctcc 300
 aagttcctac ggtgcccagc agcctgggct ttatggacag ggtggcgccc 350
 ctcccaatgt ggatcctgag gcctactcct ggttccagtc ggtggactca 400
 gatcacagtg gctatatctc catgaaggag ctaaagcagg ccctggtcaa 450
 ctgcaattgg tcttcattca atgatgagac ctgcctcatg atgataaaca 500
 tgtttgacaa gaccaagtca ggccgcatcg atgtctacgg cttctcagcc 550
 ctgtggaaat tcatccagca gtggaagaac ctcttcagc agtatgaccg 600
 ggaccgctcg ggctccatta gctacacaga gctgcagcaa gctctgtccc 650
 aaatgggcta caacctgagc cccagttca cccagcttct ggtctcccgc 700
 tactgcccac gctctgccaa tcctgccatg cagcttgacc gttcatcca 750

ggtgtgcacc cagctgcagg tgctgacaga ggccttccgg gagaaggaca 800
 cagctgtaca aggcaacatc cggctcagct tcgaggactt cgtcaccatg 850
 acagcttctc ggatgctatg acccaaccat ctgtggagag tggagtgcac 900
 cagggaacctt tcttggtctc ttagagttag agaagtatgt ggacatctct 950
 tcttttctctg tccctctaga agaacattct cccttgcttg atgcaacact 1000
 gttccaaaag aggggtggaga gtcttgcac atagccacca aatagttagg 1050
 accggggctg aggccacaca gatagggggc tgatggagga gaggatagaa 1100
 gttgaatgtc ctgatggcca tgagcagttg agtggcacag cctggcacca 1150
 ggagcaggtc cttgtaatgg agttagtgtc cagtcagctg agctccaccc 1200
 tgatgccagt ggtgagtgtt catcggcctg ttaccgtagg tacctgtgtt 1250
 ccctcaccag gccatcctgt caaacgagcc ctttttctcc aaagtggaa 1300
 ctgaccaagc atgagagaga tctgtctatg ggaccagtgg cttggattct 1350
 gccacaccca taaatccttg tgtgttaact tctagctgcc tggggctggc 1400
 cctgctcaga caaatctgct ccctgggcat ctttggccag gcttctgccc 1450
 cctgcagctg ggaccctca cttgcctgcc atgctctgct cggcttcagt 1500
 ctccaggaga cagtggtcac ctctccctgc caatactttt ttttaatttgc 1550
 attttttttc atttggggcc aaaagtccag tgaaattgta agcttcaata 1600
 aaaggatgaa actctga 1617

<210> 236
 <211> 284
 <212> PRT
 <213> Homo Sapien

<400> 236
 Met Ala Ser Tyr Pro Tyr Arg Gln Gly Cys Pro Gly Ala Ala Gly
 1 5 10 15
 Gln Ala Pro Gly Ala Pro Pro Gly Ser Tyr Tyr Pro Gly Pro Pro
 20 25 30
 Asn Ser Gly Gly Gln Tyr Gly Ser Gly Leu Pro Pro Gly Gly Gly
 35 40 45
 Tyr Gly Gly Pro Ala Pro Gly Gly Pro Tyr Gly Pro Pro Ala Gly
 50 55 60
 Gly Gly Pro Tyr Gly His Pro Asn Pro Gly Met Phe Pro Ser Gly
 65 70 75
 Thr Pro Gly Gly Pro Tyr Gly Gly Ala Ala Pro Gly Gly Pro Tyr

	80		85		90
Gly Gln Pro Pro	Pro Ser Ser Tyr Gly	Ala Gln Gln Pro Gly	Leu		
	95	100	105		
Tyr Gly Gln Gly	Gly Ala Pro Pro Asn	Val Asp Pro Glu Ala	Tyr		
	110	115	120		
Ser Trp Phe Gln	Ser Val Asp Ser Asp	His Ser Gly Tyr Ile	Ser		
	125	130	135		
Met Lys Glu Leu	Lys Gln Ala Leu Val	Asn Cys Asn Trp Ser	Ser		
	140	145	150		
Phe Asn Asp Glu	Thr Cys Leu Met Met	Ile Asn Met Phe Asp	Lys		
	155	160	165		
Thr Lys Ser Gly	Arg Ile Asp Val Tyr	Gly Phe Ser Ala Leu	Trp		
	170	175	180		
Lys Phe Ile Gln	Gln Trp Lys Asn Leu	Phe Gln Gln Tyr Asp	Arg		
	185	190	195		
Asp Arg Ser Gly	Ser Ile Ser Tyr Thr	Glu Leu Gln Gln Ala	Leu		
	200	205	210		
Ser Gln Met Gly	Tyr Asn Leu Ser Pro	Gln Phe Thr Gln Leu	Leu		
	215	220	225		
Val Ser Arg Tyr	Cys Pro Arg Ser Ala	Asn Pro Ala Met Gln	Leu		
	230	235	240		
Asp Arg Phe Ile	Gln Val Cys Thr Gln	Leu Gln Val Leu Thr	Glu		
	245	250	255		
Ala Phe Arg Glu	Lys Asp Thr Ala Val	Gln Gly Asn Ile Arg	Leu		
	260	265	270		
Ser Phe Glu Asp	Phe Val Thr Met Thr	Ala Ser Arg Met Leu			
	275	280			

<210> 237

<211> 1234

<212> DNA

<213> Homo Sapien

<400> 237

caggatgcag ggccgcgtgg caggagctg cgctcctctg ggccctgctcc 50

tgggtctgtct tcattctccca ggctcttttg cccggagcat cgggtgttg 100

gaggagaaag tttcccaaaa ctccgggacc aacttgccctc agctcggaca 150

accttctctcc actggccct ctaactctga acatccgcag cccgctctgg 200

accctaggtc taatgacttg gcaagggttc ctctgaagct cagcgtgcct 250

ccatcagatg gcttccacc tgcaggaggt tctgcagtgc agaggtggcc 300

tccatcgtgg gggctgctg ccatggattc ctggccccct gaggatcctt 350
 ggcagatgat ggctgctgcg gctgaggacc gcctggggga agcgtgcct 400
 gaagaactct cttacctctc cagtgcctgc gccctcgctc cgggcagtgg 450
 ccctttgcct ggggagtctt ctcccgatgc cacaggcctc tcacctgagg 500
 cttcactcct ccaccaggac tcggagtcca gacgactgcc ccgttctaata 550
 tcactgggag ccgggggaaa aatcctttcc caacgccctc cctggtctct 600
 catccacagg gttctgcctg atcaccctg gggtagcctg aatcccagt 650
 tgcctgggg aggtggaggc cctgggactg gttggggaac gagggccatg 700
 ccacaccctg agggaatctg gggtagcaat aatcaacccc caggtaccag 750
 ctgggggaaat attaatcgtt atccaggagg cagctgggga aatattaatc 800
 ggtatccagg aggcagctgg ggggaatatta atcggtatcc aggaggcagc 850
 tgggggaata ttcatctata ccaggtatc aataacccat ttctcctg 900
 agttctccgc cctcctggct cttcttgga catcccagct ggcttcccta 950
 atcctccaag ccctaggttg cagtggggct agagcacgat agagggaac 1000
 ccaacattgg gagttagagt cctgctcccg ccccttgctg tgtgggctca 1050
 atccaggccc tgtaacatg tttccagcac tatccccact tttcagtgc 1100
 tcccctgctc atctccaata aaataaaagc acttatgaaa aaaaaaaaaa 1150
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1200
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1234

<210> 238
 <211> 325
 <212> PRT
 <213> Homo Sapien

<400> 238
 Met Gln Gly Arg Val Ala Gly Ser Cys Ala Pro Leu Gly Leu Leu
 1 5 10 15
 Leu Val Cys Leu His Leu Pro Gly Leu Phe Ala Arg Ser Ile Gly
 20 25 30
 Val Val Glu Glu Lys Val Ser Gln Asn Phe Gly Thr Asn Leu Pro
 35 40 45
 Gln Leu Gly Gln Pro Ser Ser Thr Gly Pro Ser Asn Ser Glu His
 50 55 60
 Pro Gln Pro Ala Leu Asp Pro Arg Ser Asn Asp Leu Ala Arg Val
 65 70 75

Pro	Leu	Lys	Leu	Ser	Val	Pro	Pro	Ser	Asp	Gly	Phe	Pro	Pro	Ala	
				80					85					90	
Gly	Gly	Ser	Ala	Val	Gln	Arg	Trp	Pro	Pro	Ser	Trp	Gly	Leu	Pro	
				95					100					105	
Ala	Met	Asp	Ser	Trp	Pro	Pro	Glu	Asp	Pro	Trp	Gln	Met	Met	Ala	
				110					115					120	
Ala	Ala	Ala	Glu	Asp	Arg	Leu	Gly	Glu	Ala	Leu	Pro	Glu	Glu	Leu	
				125					130					135	
Ser	Tyr	Leu	Ser	Ser	Ala	Ala	Ala	Leu	Ala	Pro	Gly	Ser	Gly	Pro	
				140					145					150	
Leu	Pro	Gly	Glu	Ser	Ser	Pro	Asp	Ala	Thr	Gly	Leu	Ser	Pro	Glu	
				155					160					165	
Ala	Ser	Leu	Leu	His	Gln	Asp	Ser	Glu	Ser	Arg	Arg	Leu	Pro	Arg	
				170					175					180	
Ser	Asn	Ser	Leu	Gly	Ala	Gly	Gly	Lys	Ile	Leu	Ser	Gln	Arg	Pro	
				185					190					195	
Pro	Trp	Ser	Leu	Ile	His	Arg	Val	Leu	Pro	Asp	His	Pro	Trp	Gly	
				200					205					210	
Thr	Leu	Asn	Pro	Ser	Val	Ser	Trp	Gly	Gly	Gly	Gly	Pro	Gly	Thr	
				215					220					225	
Gly	Trp	Gly	Thr	Arg	Pro	Met	Pro	His	Pro	Glu	Gly	Ile	Trp	Gly	
				230					235					240	
Ile	Asn	Asn	Gln	Pro	Pro	Gly	Thr	Ser	Trp	Gly	Asn	Ile	Asn	Arg	
				245					250					255	
Tyr	Pro	Gly	Gly	Ser	Trp	Gly	Asn	Ile	Asn	Arg	Tyr	Pro	Gly	Gly	
				260					265					270	
Ser	Trp	Gly	Asn	Ile	Asn	Arg	Tyr	Pro	Gly	Gly	Ser	Trp	Gly	Asn	
				275					280					285	
Ile	His	Leu	Tyr	Pro	Gly	Ile	Asn	Asn	Pro	Phe	Pro	Pro	Gly	Val	
				290					295					300	
Leu	Arg	Pro	Pro	Gly	Ser	Ser	Trp	Asn	Ile	Pro	Ala	Gly	Phe	Pro	
				305					310					315	
Asn	Pro	Pro	Ser	Pro	Arg	Leu	Gln	Trp	Gly						
				320					325						

<210> 239

<211> 1738

<212> DNA

<213> Homo Sapien

<400> 239

gggcgtctcc ggctgctcct attgagctgt ctgctcgtctg tgcccgtctgt 50

gcctgctgtg cccgcgctgt cgccgctgct accgcgtctg ctggacgcgg 100
gagacgccag cgagctgggtg attggagccc tgaggagagc tcaagcgccc 150
agctctgccc caggagccca ggctgccccg tgagtcccat agttgctgca 200
ggagtggagc catgagctgc gtcctgggtg gtgtcatccc cttggggctg 250
ctgttcctgg tctgoggatc ccaaggctac ctctgcccac acgtcactct 300
cttagaggag ctgctcagca aataccagca caacgagtct cactcccggg 350
tccgcagagc catccccagg gaggacaagg aggagatcct catgctgcac 400
aacaagcttc ggggccagggt gcagcctcag gcctccaaca tggagtacat 450
ggtgagcgcc ggctccggcc gcagaggctg gcaccggggg tggggcctgg 500
gccaccagcc tgctctgttc ccagccagc tctgttcccc agccagtgcg 550
tgtgatggct ggctcagggt ctctctggc aggggaggat cccggctctg 600
ttctgttttg tttgtttgtt ttgagacagg gtctcactct gccactgacg 650
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gttaagcgat cctgcttcag cctcccaagt agctggaact acaggcatgc 750
accatggtgc ccagctagat tttaaatatt ttgtggagat gggggctctg 800
ctacgttgcc caggctggtc ttgaactcct aggetcaage aatcctcctg 850
cctcagcctc tcaaagtgc aggtattatag gcatgagtca ccctgtctgg 900
ctctggctct gttcttaaca ttctgccaaa acaacacacg tgggttcct 950
gtgcagagcc tgctcgttg ccttcatgtc actcttggtg gctccactgg 1000
gaacacagct ctcagccttt ccacactgga ggcagagtgg ggaggggccc 1050
agggctgggc tttgctgatg ctgatctcag ctgtgccaca cgctagctgc 1100
accaccctga cttctcctta gcccgctgta gcctcacttt ccaactggag 1150
agtccttcct cgcgtgggtg ccatgactgt gagataagtc gaggctgtga 1200
agggcccgcc acagactgac ctgcctcccc aaccctagg ctttgctaac 1250
cgggaaagga gctaacggtg acagaagaca gccaaagtca accctcccgg 1300
gtgattgtga tgggtgttcc aggtgtggtt gggcgatgct gctacttgac 1350
cccaagctcc agtgtggaaa cttccttcct ggctggtttt ccagaactac 1400
agaggaatgg accacagtct tccagggtcc ctctcgtcc accaaccggg 1450
agcctccacc ttggccatcc gtcagctatg aatggctttt taaacaaacc 1500

cacgtcccag cctgggtaac atggtaaagc cccgtctcta caaaaaaatc 1550
 caagttagcc gggcatggtg gtgcgcacct gtagtcccag ctgcagtggg 1600
 actgaggtgg aggtggaggt ggggggtggg agctgaggaa ggaggatcgc 1650
 ttgagcctgg gaagtcgagg ctgcagtgag ctgagattgc accactgcac 1700
 tccagcctgg gtgacagagc aagaccctgt ctcaaaaa 1738

<210> 240
 <211> 159
 <212> PRT
 <213> Homo Sapien

<400> 240
 Met Ser Cys Val Leu Gly Gly Val Ile Pro Leu Gly Leu Leu Phe
 1 5 10 15
 Leu Val Cys Gly Ser Gln Gly Tyr Leu Leu Pro Asn Val Thr Leu
 20 25 30
 Leu Glu Glu Leu Leu Ser Lys Tyr Gln His Asn Glu Ser His Ser
 35 40 45
 Arg Val Arg Arg Ala Ile Pro Arg Glu Asp Lys Glu Glu Ile Leu
 50 55 60
 Met Leu His Asn Lys Leu Arg Gly Gln Val Gln Pro Gln Ala Ser
 65 70 75
 Asn Met Glu Tyr Met Val Ser Ala Gly Ser Gly Arg Arg Gly Trp
 80 85 90
 His Arg Gly Trp Gly Leu Gly His Gln Pro Ala Leu Phe Pro Ser
 95 100 105
 Gln Leu Cys Ser Pro Ala Ser Ala Cys Asp Gly Trp Leu Arg Val
 110 115 120
 Ser Ser Gly Arg Gly Gly Ser Arg Leu Cys Ser Val Leu Phe Val
 125 130 135
 Cys Phe Glu Thr Gly Ser His Ser Ala Thr Asp Ala Gly Val Gln
 140 145 150
 Trp His Asn Arg His Ala Leu Lys Pro
 155

<210> 241
 <211> 422
 <212> DNA
 <213> Homo Sapien

<400> 241
 aaggagaggc caccgggact tcagtgtctc ctccatccca ggagcgcagt 50
 ggccactatg ggggtctgggc tgccccttgt cctcctcttg accctccttg 100

gcagctcaca tggaacaggg ccgggtatga ctttgcaact gaagctgaag 150
gagtcttttc tgacaaattc ctcctatgag tccagcttcc tggaattgct 200
tgaaaagctc tgcctcctcc tccatctccc ttcagggacc agcgtcaccc 250
tccaccatgc aagatctcaa caccatgttg tctgcaacac atgacagcca 300
ttgaagcctg tgtccttctt ggcccgggct tttgggcccgg ggatgcagga 350
ggcaggcccc gaccctgtct ttcagcaggc cccaccctc ctgagtggca 400
ataaataaaa ttcggtatgc tg 422

<210> 242
<211> 78
<212> PRT
<213> Homo Sapien

<400> 242
Met Gly Ser Gly Leu Pro Leu Val Leu Leu Leu Thr Leu Leu Gly
1 5 10 15
Ser Ser His Gly Thr Gly Pro Gly Met Thr Leu Gln Leu Lys Leu
20 25 30
Lys Glu Ser Phe Leu Thr Asn Ser Ser Tyr Glu Ser Ser Phe Leu
35 40 45
Glu Leu Leu Glu Lys Leu Cys Leu Leu Leu His Leu Pro Ser Gly
50 55 60
Thr Ser Val Thr Leu His His Ala Arg Ser Gln His His Val Val
65 70 75
Cys Asn Thr

<210> 243
<211> 508
<212> DNA
<213> Homo Sapien

<400> 243
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taaactcctg aaaaatatcc cagataactg tcatgaagct ggtaactatc 100
ttcctgctgg tgaccatcag cctttgtagt tactctgcta ctgccttcct 150
catcaacaaa gtgccccttc ctgttgacaa gttggcacct ttacctctgg 200
acaacattct tccctttatg gatccattaa agcttcttct gaaaactctg 250
ggcattttctg ttgagcacct tgtggagggg ctaaggaagt gtgtaaata 300
gctgggacca gaggcttctg aagctgtgaa gaaactgctg gaggcgctat 350

cacacttggt gtgacatcaa gataaagagc ggaggtggat ggggatggaa 400
 gatgatgctc ctatcctccc tgcctgaaac ctgttctacc aattatagat 450
 caaatgccct aaaatgtagt gacccgtgaa aaggacaaat aaagcaatga 500
 atacatta 508

<210> 244
 <211> 93
 <212> PRT
 <213> Homo Sapien

<400> 244
 Met Lys Leu Val Thr Ile Phe Leu Leu Val Thr Ile Ser Leu Cys
 1 5 10 15
 Ser Tyr Ser Ala Thr Ala Phe Leu Ile Asn Lys Val Pro Leu Pro
 20 25 30
 Val Asp Lys Leu Ala Pro Leu Pro Leu Asp Asn Ile Leu Pro Phe
 35 40 45
 Met Asp Pro Leu Lys Leu Leu Leu Lys Thr Leu Gly Ile Ser Val
 50 55 60
 Glu His Leu Val Glu Gly Leu Arg Lys Cys Val Asn Glu Leu Gly
 65 70 75
 Pro Glu Ala Ser Glu Ala Val Lys Lys Leu Leu Glu Ala Leu Ser
 80 85 90
 His Leu Val

<210> 245
 <211> 1564
 <212> DNA
 <213> Homo Sapien

<400> 245
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 aacacccaca gatccctcta tgactgcaat gtgaggtgtc cggctttgct 100
 ggcccagcaa gcctgataag catgaagctc ttatctttgg tggctgtggt 150
 cgggtgtttg ctggtgcccc cagctgaagc caacaagagt tctgaagata 200
 tccggtgcaa atgcatctgt ccaccttata gaaacatcag tgggcacatt 250
 tacaaccaga atgtatccca gaaggactgc aactgcctgc acgtggtgga 300
 gcccatgcca gtgcctggcc atgacgtgga ggcctactgc ctgctgtgcg 350
 agtgcaggta cgaggagcgc agcaccacca ccatcaaggt catcattgtc 400
 atctacctgt ccgtggtggg tgccctgttg ctctacatgg ccttcctgat 450

gctggtggac cctctgatcc gaaagccgga tgcatacact gagcaactgc 500
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 tccctcgggg gaccccgagc aaacacagtc ctggagcgtg tggaaggtgc 600
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 atcggcacaa gatgctcagc tagatgggct ggtgtggttg ggtcaaggcc 700
 ccaacaccat ggctgccagc ttccaggctg gacaaagcag ggggctactt 750
 ctcccttccc tcggttccag tcttcccttt aaaagcctgt ggcatttttc 800
 ctcccttccc ctaactttag aaatgttgta cttggctatt ttgattaggg 850
 aagagggatg tgggtctctga tctctgttgt cttcttgggt ctttgggggtt 900
 gaagggaggg ggaaggcagg ccagaaggga atggagacat tcgaggcggc 950
 ctcaggagtg gatgcgatct gtctctcctg gctccactct tgccgccttc 1000
 cagctctgag tcttgggaat gttgttacct ttggaagata aagctgggtc 1050
 ttcaggaaact cagtgtctgg gaggaagca tggcccagca ttcagcatgt 1100
 gttcctttct gcagtgggtc ttatcaccac ctccctccca gccccggcgc 1150
 ctcagcccca gcccagctc cagccctgag gacagctctg atgggagagc 1200
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 cgctgtcccc tgtgcaactc tcgcaactgg gcattggagt cccatgcata 1300
 ctctgctgcc ggtccctca cctgcaactg aggggtctgg gcagtcctc 1350
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 gactcgaggc tgagcgtgga tctgaacacc acagccctg tacttgggtt 1450
 gcctcttgct cctgaacttc gttgtaccag tgcattggaga gaaaattttg 1500
 tcctcttgct ttagagttgt gtgtaaatca aggaagccat cattaaattg 1550
 ttttatttct ctca 1564

<210> 246

<211> 183

<212> PRT

<213> Homo Sapien

<400> 246

Met	Lys	Leu	Leu	Ser	Leu	Val	Ala	Val	Val	Gly	Cys	Leu	Leu	Val
1				5					10					15
Pro	Pro	Ala	Glu	Ala	Asn	Lys	Ser	Ser	Glu	Asp	Ile	Arg	Cys	Lys
				20					25					30

Cys Ile Cys Pro Pro Tyr Arg Asn Ile Ser Gly His Ile Tyr Asn
35 40 45

Gln Asn Val Ser Gln Lys Asp Cys Asn Cys Leu His Val Val Glu
50 55 60

Pro Met Pro Val Pro Gly His Asp Val Glu Ala Tyr Cys Leu Leu
65 70 75

Cys Glu Cys Arg Tyr Glu Glu Arg Ser Thr Thr Thr Ile Lys Val
80 85 90

Ile Ile Val Ile Tyr Leu Ser Val Val Gly Ala Leu Leu Leu Tyr
95 100 105

Met Ala Phe Leu Met Leu Val Asp Pro Leu Ile Arg Lys Pro Asp
110 115 120

Ala Tyr Thr Glu Gln Leu His Asn Glu Glu Glu Asn Glu Asp Ala
125 130 135

Arg Ser Met Ala Ala Ala Ala Ala Ser Leu Gly Gly Pro Arg Ala
140 145 150

Asn Thr Val Leu Glu Arg Val Glu Gly Ala Gln Gln Arg Trp Lys
155 160 165

Leu Gln Val Gln Glu Gln Arg Lys Thr Val Phe Asp Arg His Lys
170 175 180

Met Leu Ser

<210> 247
<211> 826
<212> DNA
<213> Homo Sapien

<400> 247
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ctttctgagt ttcaaaaaca acagactagt actctaaaga actctttaaa 100
acaattaact gttaggattg cagttatgat tggatattat ttaattctgt 150
ttctgatgtg gggttcctcc actgtgttct gtgtgctatt aatatttacc 200
attgcagaag cttcattcag tgttgaaaat gaatgcttag tggatctgtg 250
cctcttacgc atatgttaca aattatctgg agttcctaata caatgcagag 300
ttcccctccc ctccgattgt tctaaataat tgaaagatgt ctgctgtgga 350
aaaaggcatg tatttaaatac tgtatgattc tcaaccatct ttagttggga 400
aaggctccttg aaagccaatg gaaataacttt ttttttttct tggcactaat 450
caagtgaagt ttaccttttc acttagtagg atgtgttggt acgctagtaa 500

aatagaaacc tgtgttttatt ctcaggtatt ttagaaacaa cagccatcat 550
 tttatatttat gtgtgtgttc ttggctgtat tcataaatta tatatttttg 600
 gctatcaaatt attacttcat tcaatataaa taacaatagt agaagttggt 650
 tacttagata tgctttctag ttgcattttc tcagcctatg taagactact 700
 ttgttgtaat agcctttgaa atttacagta ctgtctctct actatcttca 750
 gattacttga ttcaaataaa ccaattatgt ttgtaattga tattaataaa 800
 accagaataa aagttcatat ctaccc 826

<210> 248
 <211> 67
 <212> PRT
 <213> Homo Sapien

<400> 248
 Met Ile Gly Tyr Tyr Leu Ile Leu Phe Leu Met Trp Gly Ser Ser
 1 5 10 15
 Thr Val Phe Cys Val Leu Leu Ile Phe Thr Ile Ala Glu Ala Ser
 20 25 30
 Phe Ser Val Glu Asn Glu Cys Leu Val Asp Leu Cys Leu Leu Arg
 35 40 45
 Ile Cys Tyr Lys Leu Ser Gly Val Pro Asn Gln Cys Arg Val Pro
 50 55 60
 Leu Pro Ser Asp Cys Ser Lys
 65

<210> 249
 <211> 3170
 <212> DNA
 <213> Homo Sapien

<400> 249
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 agttcatagg gtcttgggtc cccgaaccag gaagggttga gggaaacaaa 100
 tctgcaagcc cccgcgaccc aagtgagggg ccccggtgtg gggtcctccc 150
 tccctttgca tccccacccc tccgggcttt gcgtcttctt ggggaccccc 200
 tcgcccggag atggccgcgt tgatgcggag caaggattcg tcctgctgcc 250
 tgctcctact ggccgcggtg ctgatggtgg agagctcaca gatcggcagt 300
 tcgcgggcca aactcaactc catcaagtcc tctctgggag gggagacgcc 350
 tggtcaggcc gccaatcgat ctgcgggcat gtaccaagga ctggcattcg 400
 gcggcagtaa gaagggcaaa aacctggggc aggcctaccc ttgtagcagt 450

gataaggagt	gtgaagttgg	gaggtattgc	cacagtcccc	accaagggatc	500
atcggcctgc	atggtgtgtc	ggagaaaaaa	gaagcgctgc	caccgagatg	550
gcatgtgctg	ccccagtacc	cgctgcaata	atggcatctg	tatcccagtt	600
actgaaagca	tcttaacccc	tcacatcccc	gctctggatg	gtactcggca	650
cagagatcga	aaccacggtc	attactcaaa	ccatgacttg	ggatggcaga	700
atctaggaag	accacacact	aagatgtcac	atataaaagg	gcatgaagga	750
gacccctgcc	tacgatcatc	agactgcatt	gaagggtttt	gctgtgctcg	800
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gtaccaaaca	acgcaagaag	ggttctcatg	ggctggaaat	tttcacgcgt	900
tgcgactgtg	cgaagggcct	gtcttgcaaa	gtatggaaag	atgccaccta	950
ctcctccaaa	gccagactcc	atgtgtgtca	gaaaatttga	tcaccattga	1000
ggaacatcat	caattgcaga	ctgtgaagtt	gtgtatttaa	tgcattatag	1050
catggtggaa	aataaggttc	agatgcagaa	gaatggctaa	aataagaaac	1100
gtgataagaa	tatagatgat	cacaaaaagg	gagaaagaaa	acatgaactg	1150
aatagattag	aatgggtgac	aaatgcagtg	cagccagtgt	ttccattatg	1200
caacttgtct	atgtaaataa	tgtacacatt	tgtggaaaat	gctattatta	1250
agagaacaag	cacacagtgg	aaattactga	tgagtagcat	gtgactttcc	1300
aagagtttag	gttgtgctgg	aggagaggtt	tccttcagat	tgctgattgc	1350
ttatacaaat	aacctacatg	ccagatttct	attcaacgtt	agagtttaac	1400
aaaataactcc	tagaataaact	tgttatacaa	taggttctaa	aaataaaaatt	1450
gctaaacaag	aatgaaaac	atggagcatt	gttaattttac	aacagaaaat	1500
taccttttga	tttgtaacac	tacttctgct	gttcaatcaa	gagtccttgg	1550
agataagaaa	aaaatcagtc	aatattttcca	aataattgca	aaataatggc	1600
cagttgttta	ggaaggcctt	taggaagaca	aataaataac	aaacaaacag	1650
ccacaaatac	ttttttttcca	aaattttagt	tttacctgta	attaataaga	1700
actgatacaa	gacaaaaaca	gttccttcag	attctacgga	atgacagtat	1750
atctctcttt	atcctatgtg	attcctgctc	tgaatgcatt	atattttcca	1800
aactataccc	ataaattgtg	actagtaaaa	tacttacaca	gagcagaatt	1850
ttcacagatg	gcaaaaaaat	ttaaagatgt	ccaatatatg	tgggaaaaga	1900

Met	Ala	Ala	Leu	Met	Arg	Ser	Lys	Asp	Ser	Ser	Cys	Cys	Leu	Leu	1	5	10	15
Leu	Leu	Ala	Ala	Val	Leu	Met	Val	Glu	Ser	Ser	Gln	Ile	Gly	Ser	20	25	30	
Ser	Arg	Ala	Lys	Leu	Asn	Ser	Ile	Lys	Ser	Ser	Leu	Gly	Gly	Glu	35	40	45	
Thr	Pro	Gly	Gln	Ala	Ala	Asn	Arg	Ser	Ala	Gly	Met	Tyr	Gln	Gly	50	55	60	
Leu	Ala	Phe	Gly	Gly	Ser	Lys	Lys	Gly	Lys	Asn	Leu	Gly	Gln	Ala	65	70	75	
Tyr	Pro	Cys	Ser	Ser	Asp	Lys	Glu	Cys	Glu	Val	Gly	Arg	Tyr	Cys	80	85	90	
His	Ser	Pro	His	Gln	Gly	Ser	Ser	Ala	Cys	Met	Val	Cys	Arg	Arg	95	100	105	
Lys	Lys	Lys	Arg	Cys	His	Arg	Asp	Gly	Met	Cys	Cys	Pro	Ser	Thr	110	115	120	
Arg	Cys	Asn	Asn	Gly	Ile	Cys	Ile	Pro	Val	Thr	Glu	Ser	Ile	Leu	125	130	135	
Thr	Pro	His	Ile	Pro	Ala	Leu	Asp	Gly	Thr	Arg	His	Arg	Asp	Arg	140	145	150	
Asn	His	Gly	His	Tyr	Ser	Asn	His	Asp	Leu	Gly	Trp	Gln	Asn	Leu	155	160	165	
Gly	Arg	Pro	His	Thr	Lys	Met	Ser	His	Ile	Lys	Gly	His	Glu	Gly	170	175	180	
Asp	Pro	Cys	Leu	Arg	Ser	Ser	Asp	Cys	Ile	Glu	Gly	Phe	Cys	Cys	185	190	195	
Ala	Arg	His	Phe	Trp	Thr	Lys	Ile	Cys	Lys	Pro	Val	Leu	His	Gln	200	205	210	
Gly	Glu	Val	Cys	Thr	Lys	Gln	Arg	Lys	Lys	Gly	Ser	His	Gly	Leu	215	220	225	
Glu	Ile	Phe	Gln	Arg	Cys	Asp	Cys	Ala	Lys	Gly	Leu	Ser	Cys	Lys	230	235	240	
Val	Trp	Lys	Asp	Ala	Thr	Tyr	Ser	Ser	Lys	Ala	Arg	Leu	His	Val	245	250	255	

Cys Gln Lys Ile

<210> 251
 <211> 1809
 <212> DNA
 <213> Homo Sapien

<400> 251

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 acatcacgtt tttaaaaatt gatttcttca aattcatggc aaatatttcc 150
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 tagtcagttt tcattgcata gtaatatatt catgtagtat tttctaagtt 250
 atatttttagt aattcatatg ttttagatta taggttttaa catacttgtg 300
 aaaataacttg atgtgtttta aagccttggg cagaaattct gtattgttga 350
 ggatttggtc ttttatcccc cttttaaagt catccgtcct tggctcagga 400
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 ctcaagcccc caacatccca gtctcagtc ctcagtcate ttgacttcaa 600
 atctcaacct gagccatccc cagttcttag ccagttgagc cagcgacaac 650
 agcaccagag ccaggcagtc actgttcctc ctcttggttt ggagtccttt 700
 ccttcccagg caaaacttcg agaatcaaca cctggagaca gtccctccac 750
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 agcagatgtc acaggattaa atgtgcagtt tggggctctg gaatttgggt 950
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 aatcagattc ccatcagctt gtattcgaag tctttaagtg agcctttgaa 1050
 tacatcttta tcaatgacca gtgcagtaca gaactccaca tatacaactt 1100
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tggttattaga aatgtcttaa ccacagcaag aaggaggtgg tggtctcata 1500
 ttcttctgcc ctaatcagac tgcaccacaa gtgcagcata cagtatgcat 1550
 tttaaagatg cttggggccag gcggggtggc tgatgcccac aatcccagtg 1600
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 gccgggtgtg gtggcgggcg gtgcctgtaa tcccagctac ttgggaggct 1750
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 ctgaaaaga 1809

<210> 252
 <211> 363
 <212> PRT
 <213> Homo Sapien

<400> 252

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Cys	Ser	Phe	Ile	Pro	Leu	Leu	Lys	Ser	Ser	Val	Leu	Gly	Ser	Gly	20	25	30	
Phe	Gly	Glu	Leu	Ala	Pro	Pro	Lys	Met	Ala	Asn	Ile	Thr	Ser	Ser	35	40	45	
Gln	Ile	Leu	Asp	Gln	Leu	Lys	Ala	Pro	Ser	Leu	Gly	Gln	Phe	Thr	50	55	60	
Thr	Thr	Pro	Ser	Thr	Gln	Gln	Asn	Ser	Thr	Ser	His	Pro	Thr	Thr	65	70	75	
Thr	Thr	Ser	Trp	Asp	Leu	Lys	Pro	Pro	Thr	Ser	Gln	Ser	Ser	Val	80	85	90	
Leu	Ser	His	Leu	Asp	Phe	Lys	Ser	Gln	Pro	Glu	Pro	Ser	Pro	Val	95	100	105	
Leu	Ser	Gln	Leu	Ser	Gln	Arg	Gln	Gln	His	Gln	Ser	Gln	Ala	Val	110	115	120	
Thr	Val	Pro	Pro	Pro	Gly	Leu	Glu	Ser	Phe	Pro	Ser	Gln	Ala	Lys	125	130	135	
Leu	Arg	Glu	Ser	Thr	Pro	Gly	Asp	Ser	Pro	Ser	Thr	Val	Asn	Lys	140	145	150	
Leu	Leu	Gln	Leu	Pro	Ser	Thr	Thr	Ile	Glu	Asn	Ile	Ser	Val	Ser	155	160	165	
Val	His	Gln	Pro	Gln	Pro	Lys	His	Ile	Lys	Leu	Ala	Lys	Arg	Arg	170	175	180	

Ile	Pro	Pro	Ala	Ser	Lys	Ile	Pro	Ala	Ser	Ala	Val	Glu	Met	Pro
				185					190					195
Gly	Ser	Ala	Asp	Val	Thr	Gly	Leu	Asn	Val	Gln	Phe	Gly	Ala	Leu
				200					205					210
Glu	Phe	Gly	Ser	Glu	Pro	Ser	Leu	Ser	Glu	Phe	Gly	Ser	Ala	Pro
				215					220					225
Ser	Ser	Glu	Asn	Ser	Asn	Gln	Ile	Pro	Ile	Ser	Leu	Tyr	Ser	Lys
				230					235					240
Ser	Leu	Ser	Glu	Pro	Leu	Asn	Thr	Ser	Leu	Ser	Met	Thr	Ser	Ala
				245					250					255
Val	Gln	Asn	Ser	Thr	Tyr	Thr	Thr	Ser	Val	Ile	Thr	Ser	Cys	Ser
				260					265					270
Leu	Thr	Ser	Ser	Ser	Leu	Asn	Ser	Ala	Ser	Pro	Val	Ala	Met	Ser
				275					280					285
Ser	Ser	Tyr	Asp	Gln	Ser	Ser	Val	His	Asn	Arg	Ile	Pro	Tyr	Gln
				290					295					300
Ser	Pro	Val	Ser	Ser	Ser	Glu	Ser	Ala	Pro	Gly	Thr	Ile	Met	Asn
				305					310					315
Gly	His	Gly	Gly	Gly	Arg	Ser	Gln	Gln	Thr	Leu	Asp	Ser	Lys	Tyr
				320					325					330
Ser	Ser	Lys	Leu	Leu	Leu	Ser	Trp	Leu	Val	Pro	Thr	Lys	Gln	Arg
				335					340					345
Lys	Arg	Ile	Ala	His	Val	Met	Trp	Lys	Thr	Pro	Val	Gly	Gln	Trp
				350					355					360

Leu Ile Arg

<210> 253
 <211> 2281
 <212> DNA
 <213> Homo Sapien

<400> 253
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 agctctcgca gatgtcggag ctcatggggc tgtcgggtgtt gcttgggctg 100
 ctggccctga tggcgacggc ggcggtagcg cgggggtggc tgcgcgcggg 150
 ggaggagagg agcggccggc ccgcctgcc aaaaagcaaat ggatttccac 200
 ctgacaaatc ttcgggatcc aagaagcaga aacaatatca gcggattcgg 250
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<210> 254

<211> 447

<212> PRT

<213> Homo Sapien

<400> 254

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				20					25					30
Trp	Leu	Arg	Ala	Gly	Glu	Glu	Arg	Ser	Gly	Arg	Pro	Ala	Cys	Gln
				35					40					45
Lys	Ala	Asn	Gly	Phe	Pro	Pro	Asp	Lys	Ser	Ser	Gly	Ser	Lys	Lys
				50					55					60
Gln	Lys	Gln	Tyr	Gln	Arg	Ile	Arg	Lys	Glu	Lys	Pro	Gln	Gln	His
				65					70					75
Asn	Phe	Thr	His	Arg	Leu	Leu	Ala	Ala	Ala	Leu	Lys	Ser	His	Ser
				80					85					90
Gly	Asn	Ile	Ser	Cys	Met	Asp	Phe	Ser	Ser	Asn	Gly	Lys	Tyr	Leu
				95					100					105
Ala	Thr	Cys	Ala	Asp	Asp	Arg	Thr	Ile	Arg	Ile	Trp	Ser	Thr	Lys
				110					115					120
Asp	Phe	Leu	Gln	Arg	Glu	His	Arg	Ser	Met	Arg	Ala	Asn	Val	Glu
				125					130					135
Leu	Asp	His	Ala	Thr	Leu	Val	Arg	Phe	Ser	Pro	Asp	Cys	Arg	Ala
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Phe	Ile	Val	Trp	Leu	Ala	Asn	Gly	Asp	Thr	Leu	Arg	Val	Phe	Lys
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 <212> DNA
 <213> Homo Sapien

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<210> 256
 <211> 123
 <212> PRT
 <213> Homo Sapien

<400> 256
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 Thr Ser Ala Asn Glu Asn Ser Thr Val Leu Pro Ser Ser Thr Ser
 35 40 45
 Ser Ser Ser Asp Gly Asn Leu Arg Pro Glu Ala Ile Thr Ala Ile
 50 55 60
 Ile Val Val Phe Ser Leu Leu Ala Ala Leu Leu Leu Ala Val Gly
 65 70 75
 Leu Ala Leu Leu Val Arg Lys Leu Arg Glu Lys Arg Gln Thr Glu
 80 85 90

Gly Thr Tyr Arg Pro Ser Ser Glu Glu Gln Phe Ser His Ala Ala
 95 100 105

Glu Ala Arg Ala Pro Gln Asp Ser Lys Glu Thr Val Gln Gly Cys
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Leu Pro Ile

<210> 257

<211> 3265

<212> DNA

<213> Homo Sapien

<400> 257

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<210> 258

<211> 919

<212> PRT

<213> Homo Sapien

<400> 258

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Leu	His	Gln	Ser	Asn	Thr	Ser	Phe	Ile	Lys	Leu	Asn	Asn	Asn	Gly
				20					25					30
Phe	Glu	Asp	Ile	Val	Ile	Val	Ile	Asp	Pro	Ser	Val	Pro	Glu	Asp
				35					40					45
Glu	Lys	Ile	Ile	Glu	Gln	Ile	Glu	Asp	Met	Val	Thr	Thr	Ala	Ser
				50					55					60
Thr	Tyr	Leu	Phe	Glu	Ala	Thr	Glu	Lys	Arg	Phe	Phe	Phe	Lys	Asn
				65					70					75
Val	Ser	Ile	Leu	Ile	Pro	Glu	Asn	Trp	Lys	Glu	Asn	Pro	Gln	Tyr
				80					85					90
Lys	Arg	Pro	Lys	His	Glu	Asn	His	Lys	His	Ala	Asp	Val	Ile	Val
				95					100					105
Ala	Pro	Pro	Thr	Leu	Pro	Gly	Arg	Asp	Glu	Pro	Tyr	Thr	Lys	Gln

110										115					120				
Phe	Thr	Glu	Cys	Gly 125	Glu	Lys	Gly	Glu	Tyr	Ile	His	Phe	Thr	Pro					
Asp	Leu	Leu	Leu	Gly 140	Lys	Lys	Gln	Asn	Glu	Tyr	Gly	Pro	Pro	Gly 150					
Lys	Leu	Phe	Val	His 155	Glu	Trp	Ala	His	Leu	Arg	Trp	Gly	Val	Phe 165					
Asp	Glu	Tyr	Asn	Glu 170	Asp	Gln	Pro	Phe	Tyr	Arg	Ala	Lys	Ser	Lys 180					
Lys	Ile	Glu	Ala	Thr 185	Arg	Cys	Ser	Ala	Gly	Ile	Ser	Gly	Arg	Asn 195					
Arg	Val	Tyr	Lys	Cys 200	Gln	Gly	Gly	Ser	Cys	Leu	Ser	Arg	Ala	Cys 210					
Arg	Ile	Asp	Ser	Thr 215	Thr	Lys	Leu	Tyr	Gly	Lys	Asp	Cys	Gln	Phe 225					
Phe	Pro	Asp	Lys	Val 230	Gln	Thr	Glu	Lys	Ala	Ser	Ile	Met	Phe	Met 240					
Gln	Ser	Ile	Asp	Ser 245	Val	Val	Glu	Phe	Cys	Asn	Glu	Lys	Thr	His 255					
Asn	Gln	Glu	Ala	Pro 260	Ser	Leu	Gln	Asn	Ile	Lys	Cys	Asn	Phe	Arg 270					
Ser	Thr	Trp	Glu	Val 275	Ile	Ser	Asn	Ser	Glu	Asp	Phe	Lys	Asn	Thr 285					
Ile	Pro	Met	Val	Thr 290	Pro	Pro	Pro	Pro	Pro	Val	Phe	Ser	Leu	Leu 300					
Lys	Ile	Ser	Gln	Arg 305	Ile	Val	Cys	Leu	Val	Leu	Asp	Lys	Ser	Gly 315					
Ser	Met	Gly	Gly	Lys 320	Asp	Arg	Leu	Asn	Arg	Met	Asn	Gln	Ala	Ala 330					
Lys	His	Phe	Leu	Leu 335	Gln	Thr	Val	Glu	Asn	Gly	Ser	Trp	Val	Gly 345					
Met	Val	His	Phe	Asp 350	Ser	Thr	Ala	Thr	Ile	Val	Asn	Lys	Leu	Ile 360					
Gln	Ile	Lys	Ser	Ser 365	Asp	Glu	Arg	Asn	Thr	Leu	Met	Ala	Gly	Leu 375					
Pro	Thr	Tyr	Pro	Leu 380	Gly	Gly	Thr	Ser	Ile	Cys	Ser	Gly	Ile	Lys 390					
Tyr	Ala	Phe	Gln	Val 395	Ile	Gly	Glu	Leu	His	Ser	Gln	Leu	Asp	Gly 405					

Ser Glu Val Leu	Leu Leu Thr Asp Gly	Glu Asp Asn Thr Ala Ser	410	415	420
Ser Cys Ile Asp	Glu Val Lys Gln Ser	Gly Ala Ile Val His Phe	425	430	435
Ile Ala Leu Gly	Arg Ala Ala Asp Glu	Ala Val Ile Glu Met Ser	440	445	450
Lys Ile Thr Gly	Gly Ser His Phe Tyr	Val Ser Asp Glu Ala Gln	455	460	465
Asn Asn Gly Leu	Ile Asp Ala Phe Gly	Ala Leu Thr Ser Gly Asn	470	475	480
Thr Asp Leu Ser	Gln Lys Ser Leu Gln	Leu Glu Ser Lys Gly Leu	485	490	495
Thr Leu Asn Ser	Asn Ala Trp Met Asn	Asp Thr Val Ile Ile Asp	500	505	510
Ser Thr Val Gly	Lys Asp Thr Phe Phe	Leu Ile Thr Trp Asn Ser	515	520	525
Leu Pro Pro Ser	Ile Ser Leu Trp Asp	Pro Ser Gly Thr Ile Met	530	535	540
Glu Asn Phe Thr	Val Asp Ala Thr Ser	Lys Met Ala Tyr Leu Ser	545	550	555
Ile Pro Gly Thr	Ala Lys Val Gly Thr	Trp Ala Tyr Asn Leu Gln	560	565	570
Ala Lys Ala Asn	Pro Glu Thr Leu Thr	Ile Thr Val Thr Ser Arg	575	580	585
Ala Ala Asn Ser	Ser Val Pro Pro Ile	Thr Val Asn Ala Lys Met	590	595	600
Asn Lys Asp Val	Asn Ser Phe Pro Ser	Pro Met Ile Val Tyr Ala	605	610	615
Glu Ile Leu Gln	Gly Tyr Val Pro Val	Leu Gly Ala Asn Val Thr	620	625	630
Ala Phe Ile Glu	Ser Gln Asn Gly His	Thr Glu Val Leu Glu Leu	635	640	645
Leu Asp Asn Gly	Ala Gly Ala Asp Ser	Phe Lys Asn Asp Gly Val	650	655	660
Tyr Ser Arg Tyr	Phe Thr Ala Tyr Thr	Glu Asn Gly Arg Tyr Ser	665	670	675
Leu Lys Val Arg	Ala His Gly Gly Ala	Asn Thr Ala Arg Leu Lys	680	685	690
Leu Arg Pro Pro	Leu Asn Arg Ala Ala	Tyr Ile Pro Gly Trp Val			

695										700					705				
Val	Asn	Gly	Glu	Ile	Glu	Ala	Asn	Pro	Pro	Pro	Arg	Pro	Glu	Ile	Asp				
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Glu	Asp	Thr	Gln	Thr	Thr	Leu	Glu	Asp	Phe	Ser	Arg	Thr	Ala	Ser					
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Gly	Gly	Ala	Phe	Val	Val	Ser	Gln	Val	Pro	Ser	Leu	Pro	Leu	Pro					
				740										745					750
Asp	Gln	Tyr	Pro	Pro	Ser	Gln	Ile	Thr	Asp	Leu	Asp	Ala	Thr	Val					
				755										760					765
His	Glu	Asp	Lys	Ile	Ile	Leu	Thr	Trp	Thr	Ala	Pro	Gly	Asp	Asn					
				770										775					780
Phe	Asp	Val	Gly	Lys	Val	Gln	Arg	Tyr	Ile	Ile	Arg	Ile	Ser	Ala					
				785										790					795
Ser	Ile	Leu	Asp	Leu	Arg	Asp	Ser	Phe	Asp	Asp	Ala	Leu	Gln	Val					
				800										805					810
Asn	Thr	Thr	Asp	Leu	Ser	Pro	Lys	Glu	Ala	Asn	Ser	Lys	Glu	Ser					
				815										820					825
Phe	Ala	Phe	Lys	Pro	Glu	Asn	Ile	Ser	Glu	Glu	Asn	Ala	Thr	His					
				830										835					840
Ile	Phe	Ile	Ala	Ile	Lys	Ser	Ile	Asp	Lys	Ser	Asn	Leu	Thr	Ser					
				845										850					855
Lys	Val	Ser	Asn	Ile	Ala	Gln	Val	Thr	Leu	Phe	Ile	Pro	Gln	Ala					
				860										865					870
Asn	Pro	Asp	Asp	Ile	Asp	Pro	Thr	Pro	Thr	Pro	Thr	Pro	Thr	Pro					
				875										880					885
Thr	Pro	Asp	Lys	Ser	His	Asn	Ser	Gly	Val	Asn	Ile	Ser	Thr	Leu					
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Val	Leu	Ser	Val	Ile	Gly	Ser	Val	Val	Ile	Val	Asn	Phe	Ile	Leu					
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Ser Thr Thr Ile

<210> 259
 <211> 2243
 <212> DNA
 <213> Homo Sapien

<400> 259
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<212> PRT

<213> Homo Sapien

<400> 264

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<211> 1089

<212> PRT

<213> Homo Sapien

<400> 266

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Tyr	Arg	Ser	Gln	Val	Asp	Pro	Pro	Thr	Thr	Thr	Met	Gln	Arg	Leu	125	130	135	
Lys	Ala	Leu	Thr	Thr	Gly	Ser	Leu	Pro	Thr	Phe	Ile	Asp	Ala	Gly	140	145	150	
Ser	Asn	Phe	Ala	Ser	His	Ala	Ile	Val	Glu	Asp	Asn	Leu	Ile	Lys	155	160	165	
Gln	Leu	Thr	Ser	Ala	Gly	Arg	Arg	Val	Val	Phe	Met	Gly	Asp	Asp	170	175	180	
Thr	Trp	Lys	Asp	Leu	Phe	Pro	Gly	Ala	Phe	Ser	Lys	Ala	Phe	Phe	185	190	195	
Phe	Pro	Ser	Phe	Asn	Val	Arg	Asp	Leu	Asp	Thr	Val	Asp	Asn	Gly	200	205	210	
Ile	Leu	Glu	His	Leu	Tyr	Pro	Thr	Met	Asp	Ser	Gly	Glu	Trp	Asp	215	220	225	
Val	Leu	Ile	Ala	His	Phe	Leu	Gly	Val	Asp	His	Cys	Gly	His	Lys	230	235	240	
His	Gly	Pro	His	His	Pro	Glu	Met	Ala	Lys	Lys	Leu	Ser	Gln	Met	245	250	255	
Asp	Gln	Val	Ile	Gln	Gly	Leu	Val	Glu	Arg	Leu	Glu	Asn	Asp	Thr	260	265	270	
Leu	Leu	Val	Val	Ala	Gly	Asp	His	Gly	Met	Thr	Thr	Asn	Gly	Asp	275	280	285	

His	Gly	Gly	Asp	Ser 290	Glu	Leu	Glu	Val	Ser 295	Ala	Ala	Leu	Phe	Leu 300
Tyr	Ser	Pro	Thr	Ala 305	Val	Phe	Pro	Ser	Thr 310	Pro	Pro	Glu	Glu	Pro 315
Glu	Val	Ile	Pro	Gln 320	Val	Ser	Leu	Val	Pro 325	Thr	Leu	Ala	Leu	Leu 330
Leu	Gly	Leu	Pro	Ile 335	Pro	Phe	Gly	Asn	Ile 340	Gly	Glu	Val	Met	Ala 345
Glu	Leu	Phe	Ser	Gly 350	Gly	Glu	Asp	Ser	Gln 355	Pro	His	Ser	Ser	Ala 360
Leu	Ala	Gln	Ala	Ser 365	Ala	Leu	His	Leu	Asn 370	Ala	Gln	Gln	Val	Ser 375
Arg	Phe	Leu	His	Thr 380	Tyr	Ser	Ala	Ala	Thr 385	Gln	Asp	Leu	Gln	Ala 390
Lys	Glu	Leu	His	Gln 395	Leu	Gln	Asn	Leu	Phe 400	Ser	Lys	Ala	Ser	Ala 405
Asp	Tyr	Gln	Trp	Leu 410	Leu	Gln	Ser	Pro	Lys 415	Gly	Ala	Glu	Ala	Thr 420
Leu	Pro	Thr	Val	Ile 425	Ala	Glu	Leu	Gln	Gln 430	Phe	Leu	Arg	Gly	Ala 435
Arg	Ala	Met	Cys	Ile 440	Glu	Ser	Trp	Ala	Arg 445	Phe	Ser	Leu	Val	Arg 450
Met	Ala	Gly	Gly	Thr 455	Ala	Leu	Leu	Ala	Ala 460	Ser	Cys	Phe	Ile	Cys 465
Leu	Leu	Ala	Ser	Gln 470	Trp	Ala	Ile	Ser	Pro 475	Gly	Phe	Pro	Phe	Cys 480
Pro	Leu	Leu	Leu	Thr 485	Pro	Val	Ala	Trp	Gly 490	Leu	Val	Gly	Ala	Ile 495
Ala	Tyr	Ala	Gly	Leu 500	Leu	Gly	Thr	Ile	Glu 505	Leu	Lys	Leu	Asp	Leu 510
Val	Leu	Leu	Gly	Ala 515	Val	Ala	Ala	Val	Ser 520	Ser	Phe	Leu	Pro	Phe 525
Leu	Trp	Lys	Ala	Trp 530	Ala	Gly	Trp	Gly	Ser 535	Lys	Arg	Pro	Leu	Ala 540
Thr	Leu	Phe	Pro	Ile 545	Pro	Gly	Pro	Val	Leu 550	Leu	Leu	Leu	Leu	Phe 555
Arg	Leu	Ala	Val	Phe 560	Phe	Ser	Asp	Ser	Phe 565	Val	Val	Ala	Glu	Ala 570
Arg	Ala	Thr	Pro	Phe	Leu	Leu	Gly	Ser	Phe	Ile	Leu	Leu	Leu	Val

Val Gln Leu His	Trp Glu Gly Gln Leu	Leu Pro Pro Lys Leu Leu	575	580	585
	590	595			600
Thr Met Pro Arg	Leu Gly Thr Ser Ala	Thr Thr Asn Pro Pro Arg	605	610	615
His Asn Gly Ala	Tyr Ala Leu Arg Leu	Gly Ile Gly Leu Leu Leu	620	625	630
Cys Thr Arg Leu	Ala Gly Leu Phe His	Arg Cys Pro Glu Glu Thr	635	640	645
Pro Val Cys His	Ser Ser Pro Trp Leu	Ser Pro Leu Ala Ser Met	650	655	660
Val Gly Gly Arg	Ala Lys Asn Leu Trp	Tyr Gly Ala Cys Val Ala	665	670	675
Ala Leu Val Ala	Leu Leu Ala Ala Val	Arg Leu Trp Leu Arg Arg	680	685	690
Tyr Gly Asn Leu	Lys Ser Pro Glu Pro	Pro Met Leu Phe Val Arg	695	700	705
Trp Gly Leu Pro	Leu Met Ala Leu Gly	Thr Ala Ala Tyr Trp Ala	710	715	720
Leu Ala Ser Gly	Ala Asp Glu Ala Pro	Pro Arg Leu Arg Val Leu	725	730	735
Val Ser Gly Ala	Ser Met Val Leu Pro	Arg Ala Val Ala Gly Leu	740	745	750
Ala Ala Ser Gly	Leu Ala Leu Leu Leu	Trp Lys Pro Val Thr Val	755	760	765
Leu Val Lys Ala	Gly Ala Gly Ala Pro	Arg Thr Arg Thr Val Leu	770	775	780
Thr Pro Phe Ser	Gly Pro Pro Thr Ser	Gln Ala Asp Leu Asp Tyr	785	790	795
Val Val Pro Gln	Ile Tyr Arg His Met	Gln Glu Glu Phe Arg Gly	800	805	810
Arg Leu Glu Arg	Thr Lys Ser Gln Gly	Pro Leu Thr Val Ala Ala	815	820	825
Tyr Gln Leu Gly	Ser Val Tyr Ser Ala	Ala Met Val Thr Ala Leu	830	835	840
Thr Leu Leu Ala	Phe Pro Leu Leu Leu	Leu His Ala Glu Arg Ile	845	850	855
Ser Leu Val Phe	Leu Leu Leu Phe Leu	Gln Ser Phe Leu Leu Leu	860	865	870

His Leu Leu Ala Ala Gly Ile Pro Val Thr Thr Pro Gly Pro Phe
875 880 885

Thr Val Pro Trp Gln Ala Val Ser Ala Trp Ala Leu Met Ala Thr
890 895 900

Gln Thr Phe Tyr Ser Thr Gly His Gln Pro Val Phe Pro Ala Ile
905 910 915

His Trp His Ala Ala Phe Val Gly Phe Pro Glu Gly His Gly Ser
920 925 930

Cys Thr Trp Leu Pro Ala Leu Leu Val Gly Ala Asn Thr Phe Ala
935 940 945

Ser His Leu Leu Phe Ala Val Gly Cys Pro Leu Leu Leu Leu Trp
950 955 960

Pro Phe Leu Cys Glu Ser Gln Gly Leu Arg Lys Arg Gln Gln Pro
965 970 975

Pro Gly Asn Glu Ala Asp Ala Arg Val Arg Pro Glu Glu Glu Glu
980 985 990

Glu Pro Leu Met Glu Met Arg Leu Arg Asp Ala Pro Gln His Phe
995 1000 1005

Tyr Ala Ala Leu Leu Gln Leu Gly Leu Lys Tyr Leu Phe Ile Leu
1010 1015 1020

Gly Ile Gln Ile Leu Ala Cys Ala Leu Ala Ala Ser Ile Leu Arg
1025 1030 1035

Arg His Leu Met Val Trp Lys Val Phe Ala Pro Lys Phe Ile Phe
1040 1045 1050

Glu Ala Val Gly Phe Ile Val Ser Ser Val Gly Leu Leu Leu Gly
1055 1060 1065

Ile Ala Leu Val Met Arg Val Asp Gly Ala Val Ser Ser Trp Phe
1070 1075 1080

Arg Gln Leu Phe Leu Ala Gln Gln Arg
1085

<210> 267

<211> 1701

<212> DNA

<213> Homo Sapien

<220>

<221> unsure

<222> 1528

<223> unknown base

<400> 267

gagactgcag agggagataa agagagaggg caaagaggca gcaagagatt 50

gaaatcgctg tgttgttaat gcagaganca aactctgttt agttgcaggg 1550
gaagtttggg atatacccca aagtcctcta cccctcact tttatggccc 1600
tttccctaga tatactgcgg gatctctcct taggataaag agttgctggt 1650
gaagttgtat atttttgatc aatatatttg gaaattaaag tttctgactt 1700
t 1701

<210> 268
<211> 337
<212> PRT
<213> Homo Sapien

<400> 268
Met Leu Phe Ser Ala Leu Leu Leu Glu Val Ile Trp Ile Leu Ala
1 5 10 15
Ala Asp Gly Gly Gln His Trp Thr Tyr Glu Gly Pro His Gly Gln
20 25 30
Asp His Trp Pro Ala Ser Tyr Pro Glu Cys Gly Asn Asn Ala Gln
35 40 45
Ser Pro Ile Asp Ile Gln Thr Asp Ser Val Thr Phe Asp Pro Asp
50 55 60
Leu Pro Ala Leu Gln Pro His Gly Tyr Asp Gln Pro Gly Thr Glu
65 70 75
Pro Leu Asp Leu His Asn Asn Gly His Thr Val Gln Leu Ser Leu
80 85 90
Pro Ser Thr Leu Tyr Leu Gly Gly Leu Pro Arg Lys Tyr Val Ala
95 100 105
Ala Gln Leu His Leu His Trp Gly Gln Lys Gly Ser Pro Gly Gly
110 115 120
Ser Glu His Gln Ile Asn Ser Glu Ala Thr Phe Ala Glu Leu His
125 130 135
Ile Val His Tyr Asp Ser Asp Ser Tyr Asp Ser Leu Ser Glu Ala
140 145 150
Ala Glu Arg Pro Gln Gly Leu Ala Val Leu Gly Ile Leu Ile Glu
155 160 165
Val Gly Glu Thr Lys Asn Ile Ala Tyr Glu His Ile Leu Ser His
170 175 180
Leu His Glu Val Arg His Lys Asp Gln Lys Thr Ser Val Pro Pro
185 190 195
Phe Asn Leu Arg Glu Leu Leu Pro Lys Gln Leu Gly Gln Tyr Phe
200 205 210

				125					130					135
Cys	Ala	Gly	Ala	Gly 140	Cys	Gly	Ala	Gly	Gly 145	Ala	Cys	Thr	Gly	Gly 150
Gly	Cys	Cys	Cys	Thr 155	Cys	Ala	Ala	Cys	Ala 160	Thr	Gly	Gly	Ala	Gly 165
Ala	Thr	Cys	Thr	Gly 170	Cys	Gly	Ala	Cys	Ala 175	Thr	Cys	Ala	Thr	Cys 180
Ala	Ala	Cys	Gly	Ala 185	Gly	Ala	Cys	Gly	Gly 190	Ala	Gly	Gly	Ala	Ala 195
Gly	Gly	Thr	Cys	Cys 200	Cys	Ala	Ala	Ala	Gly 205	Ala	Thr	Gly	Cys	Cys 210
Cys	Thr	Cys	Cys	Gly 215	Ala	Gly	Cys	Ala	Gly 220	Thr	Ala	Ala	Ala	Gly 225
Ala	Ala	Gly	Ala	Gly 230	Ala	Ala	Thr	Cys	Gly 235	Thr	Gly	Gly	Gly	Gly 240
Ala	Ala	Thr	Ala	Ala 245	Gly	Ala	Ala	Cys	Thr 250	Thr	Cys	Cys	Ala	Cys 255
Gly	Ala	Gly	Gly	Thr 260	Gly	Ala	Thr	Gly	Cys 265	Thr	Gly	Gly	Cys	Thr 270
Cys	Thr	Cys	Ala	Cys 275	Ala	Gly	Thr	Cys	Thr 280	Thr	Ala	Gly	Ala	Ala 285
Ala	Cys	Cys	Thr	Gly 290	Thr	Gly	Thr	Cys	Ala 295	Ala	Gly	Ala	Ala	Cys 300
Thr	Gly	Cys	Gly	Gly 305	Gly	Cys	Ala	Cys	Cys 310	Gly	Cys	Thr	Thr	Cys 315
Cys	Ala	Cys	Gly	Thr 320	Gly	Cys	Thr	Gly	Gly 325	Thr	Gly	Gly	Cys	Cys 330
Ala	Gly	Cys	Cys	Ala 335	Gly	Gly	Ala	Cys	Thr 340	Thr	Cys	Gly	Thr	Gly 345
Gly	Ala	Gly	Ala	Gly 350	Thr	Gly	Thr	Gly	Cys 355	Thr	Gly	Gly	Thr	Gly 360
Ala	Gly	Gly	Ala	Cys 365	Cys	Ala	Thr	Cys	Cys 370	Thr	Gly	Cys	Cys	Cys 375
Ala	Ala	Gly	Ala	Ala 380	Cys	Ala	Ala	Cys	Cys 385	Cys	Ala	Cys	Cys	Cys 390
Ala	Cys	Cys	Ala	Thr 395	Cys	Gly	Thr	Gly	Cys 400	Ala	Thr	Gly	Ala	Cys 405
Ala	Ala	Ala	Gly	Thr 410	Gly	Cys	Thr	Cys	Ala 415	Ala	Cys	Cys	Thr	Cys 420

Ala Thr Cys Cys	Ala Gly Thr Cys Cys	Thr Gly Gly Gly Cys	Thr
425		430	435
Gly Ala Cys Gly	Cys Gly Thr Thr Cys	Cys Gly Cys Ala Gly	Cys
440		445	450
Thr Cys Gly Cys	Cys Cys Gly Ala Thr	Cys Thr Gly Ala Cys	Ala
455		460	465
Gly Gly Thr Gly	Thr Gly Gly Thr Cys	Ala Cys Cys Ala Thr	Cys
470		475	480
Thr Ala Thr Gly	Ala Gly Gly Ala Cys	Cys Thr Gly Cys Gly	Gly
485		490	495
Ala Gly Gly Ala	Ala Ala Gly Gly Cys	Cys Thr Gly Gly Ala	Gly
500		505	510
Thr Thr Cys Cys	Cys Cys Ala Thr Gly	Ala Cys Thr Gly Ala	Cys
515		520	525
Cys Thr Gly Gly	Ala Cys Ala Thr Gly	Cys Thr Gly Thr Cys	Ala
530		535	540
Cys Cys Cys Ala	Thr Cys Cys Ala Cys	Ala Cys Ala Cys Cys	Cys
545		550	555
Ala Gly Ala Gly	Gly Ala Cys Cys Gly	Thr Gly Thr Thr Cys	Ala
560		565	570
Ala Cys Thr Cys	Ala Gly Ala Gly Ala	Cys Ala Cys Ala Ala	Thr
575		580	585
Cys Ala Gly Gly	Ala Cys Ala Gly Gly	Ala Thr Thr Cys Thr	Gly
590		595	600
Thr Gly Gly Gly	Cys Ala Cys Thr Gly	Ala Cys Thr Cys Cys	Ala
605		610	615
Gly Cys Cys Ala	Gly Cys Ala Ala Gly	Ala Gly Gly Ala Cys	Thr
620		625	630
Cys Thr Gly Gly	Cys Cys Ala Gly Cys	Ala Thr Gly Cys Thr	Gly
635		640	645
Cys Cys Cys Cys	Thr Cys Thr Gly Cys	Cys Cys Gly Cys Cys	Cys
650		655	660
Cys Gly Cys Cys	Cys Ala Thr Ala Cys	Thr Cys Thr Cys Cys	Gly
665		670	675
Gly Thr Gly Ala	Cys Ala Cys Gly Cys	Cys Cys Ala Thr Ala	Gly
680		685	690
Cys Ala Cys Cys	Ala Ala Cys Cys Cys	Cys Gly Gly Ala Ala	Cys
695		700	705
Ala Gly Ala Thr	Thr Gly Gly Gly Ala	Ala Gly Cys Thr Gly	Cys

	710		715		720
Gly Cys Ala Gly	Thr Gly Ala Gly Cys	Thr Gly Gly Ala Gly Ala			
	725		730		735
Thr Gly Gly Thr	Gly Ala Gly Thr Gly	Gly Gly Ala Ala Cys Gly			
	740		745		750
Thr Gly Ala Gly	Gly Gly Thr Gly Ala	Thr Gly Thr Cys Gly Gly			
	755		760		765
Ala Gly Ala Thr	Gly Cys Thr Gly Ala	Cys Gly Gly Ala Gly Cys			
	770		775		780
Thr Gly Gly Thr	Gly Cys Cys Cys Ala	Cys Cys Cys Ala Gly Gly			
	785		790		795
Cys Cys Gly Ala	Gly Cys Cys Cys Gly	Cys Ala Gly Ala Cys Cys			
	800		805		810
Thr Gly Gly Ala	Gly Cys Thr Gly Cys	Thr Gly Cys Ala Gly Gly			
	815		820		825
Ala Gly Cys Thr	Cys Ala Ala Cys Cys	Gly Cys Ala Cys Gly Thr			
	830		835		840
Gly Cys Cys Gly	Ala Gly Cys Cys Ala	Thr Gly Cys Ala Gly Cys			
	845		850		855
Ala Gly Cys Gly	Gly Gly Thr Cys Cys	Thr Gly Ala Gly Thr Gly			
	860		865		870
Ala Thr Ala Cys	Cys Cys Thr Gly Cys	Thr Cys Cys Gly Gly Gly			
	875		880		885
Cys Cys Cys Ala	Thr Gly Cys Cys Cys	Cys Ala Ala Gly Gly Ala			
	890		895		900
Gly Cys Cys Cys	Thr Thr Cys Ala Gly	Ala Gly Cys Cys Cys Ala			
	905		910		915
Cys Ala Cys Thr	Gly Cys Cys Ala Gly	Thr Cys Gly Ala Gly Gly			
	920		925		930
Cys Cys Thr Gly	Gly Cys Thr Gly Gly	Ala Gly Gly Cys Thr Gly			
	935		940		945
Gly Cys Cys Ala	Cys Ala Gly Thr Gly	Gly Ala Ala Ala Thr Thr			
	950		955		960
Cys Thr Gly Cys	Cys Gly Ala Gly Cys	Cys Thr Ala Thr Thr Gly			
	965		970		975
Thr Cys Cys Cys	Thr Ala Cys Cys Cys	Thr Gly Cys Thr Cys Thr			
	980		985		990
Gly Cys Thr Gly	Cys Ala Thr Gly Gly	Gly Gly Cys Cys Cys Cys			
	995		1000		1005

Ala Thr Gly Gly Cys Thr Thr Thr Gly Gly Cys Thr Gly Gly Cys	1010	1015	1020
Cys Ala Cys Thr Gly Ala Gly Gly Gly Thr Ala Gly Gly Gly Thr	1025	1030	1035
Gly Thr Gly Gly Ala Gly Gly Thr Gly Thr Gly Gly Ala Gly Gly	1040	1045	1050
Cys Cys Cys Cys Cys Thr Gly Ala Gly Gly Ala Gly Cys Thr Gly	1055	1060	1065
Cys Gly Gly Cys Gly Gly Cys Cys Cys Ala Gly Gly Thr Ala Cys	1070	1075	1080
Gly Ala Ala Gly Cys Thr Gly Cys Ala Ala Cys Thr Cys Thr Gly	1085	1090	1095
Cys Gly Cys Gly Cys Ala Gly Thr Gly Gly Gly Cys Gly Ala Gly	1100	1105	1110
Ala Thr Cys Thr Cys Ala Thr Cys Ala Gly Cys Cys Cys Cys Ala	1115	1120	1125
Gly Gly Cys Thr Gly Cys Ala Gly Gly Thr Gly Ala Gly Gly Cys	1130	1135	1140
Thr Thr Cys Ala Gly Gly Gly Gly Ala Thr Gly Cys Thr Gly Gly	1145	1150	1155
Gly Gly Cys Cys Cys Cys Ala Cys Thr Gly Cys Cys Cys Cys Thr	1160	1165	1170
Cys Cys Gly Cys Thr Gly Cys Cys Thr Thr Gly Cys Cys Cys Thr	1175	1180	1185
Cys Cys Ala Thr Cys Cys Thr Thr Cys Cys Thr Cys Thr Gly Thr	1190	1195	1200
Thr Cys Cys Thr Thr Cys Thr Gly Gly Cys Cys Gly Gly Gly Cys	1205	1210	1215
Ala Cys Cys Ala Cys Ala Gly Cys Ala Cys Thr Gly Gly Gly Gly	1220	1225	1230
Cys Thr Cys Ala Cys Cys Thr Cys Thr Thr Gly Gly Thr Thr Gly	1235	1240	1245
Ala Thr Cys Cys Thr Cys Thr Thr Gly Thr Ala Cys Thr Gly Gly	1250	1255	1260
Gly Ala Gly Ala Gly Gly Thr Gly Cys Cys Thr Thr Thr Thr Gly	1265	1270	1275
Thr Ala Thr Cys Cys Cys Cys Ala Ala Thr Thr Ala Ala Ala Gly	1280	1285	1290
Gly Thr Ala Gly Ala Ala Ala Cys Cys			

1295

1300

<210> 270

<211> 209

<212> PRT

<213> Homo Sapien

<400> 270

Met	Asp	Phe	Leu	Leu	Gly	Asn	Pro	Phe	Ser	Ser	Pro	Val	Gly	Gln
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Arg	Ile	Glu	Lys	Ala	Thr	Asp	Gly	Ser	Leu	Gln	Ser	Glu	Asp	Trp
				20					25					30
Ala	Leu	Asn	Met	Glu	Ile	Cys	Asp	Ile	Ile	Asn	Glu	Thr	Glu	Glu
				35					40					45
Gly	Pro	Lys	Asp	Ala	Leu	Arg	Ala	Val	Lys	Lys	Arg	Ile	Val	Gly
				50					55					60
Asn	Lys	Asn	Phe	His	Glu	Val	Met	Leu	Ala	Leu	Thr	Val	Leu	Glu
				65					70					75
Thr	Cys	Val	Lys	Asn	Cys	Gly	His	Arg	Phe	His	Val	Leu	Val	Ala
				80					85					90
Ser	Gln	Asp	Phe	Val	Glu	Ser	Val	Leu	Val	Arg	Thr	Ile	Leu	Pro
				95					100					105
Lys	Asn	Asn	Pro	Pro	Thr	Ile	Val	His	Asp	Lys	Val	Leu	Asn	Leu
				110					115					120
Ile	Gln	Ser	Trp	Ala	Asp	Ala	Phe	Arg	Ser	Ser	Pro	Asp	Leu	Thr
				125					130					135
Gly	Val	Val	Thr	Ile	Tyr	Glu	Asp	Leu	Arg	Arg	Lys	Gly	Leu	Glu
				140					145					150
Phe	Pro	Met	Thr	Asp	Leu	Asp	Met	Leu	Ser	Pro	Ile	His	Thr	Pro
				155					160					165
Arg	Gly	Pro	Cys	Ser	Thr	Gln	Arg	His	Asn	Gln	Asp	Arg	Ile	Leu
				170					175					180
Trp	Ala	Leu	Thr	Pro	Ala	Ser	Lys	Arg	Thr	Leu	Ala	Ser	Met	Leu
				185					190					195
Pro	Leu	Cys	Pro	Pro	Arg	Pro	Tyr	Ser	Pro	Val	Thr	Arg	Pro	
				200					205					

<210> 271

<211> 1114

<212> DNA

<213> Homo Sapien

<400> 271

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tctgctgact gtggccaccg cctgatgct gcccgtaag cccccgcag 150
gtcctgagg gggccagatc atcgggggcc acgaggtgac cccccactcc 200
aggccctaca tggcatccgt gcgcttcggg ggccaacatc actgcggagg 250
cttcctgctg cgagcccgtt ggggtggtctt ggccgcccac tgcttcagcc 300
acagagacct ccgactggc ctggtggtgc tgggcgcca cgtcctgagt 350
actgcggagc ccaccagca ggtgtttggc atcgatgctc tcaccacgca 400
ccccgactac caccatga ccacgcca cgacatctgc ctgctgcggc 450
tgaacggctc tgctgtcctg ggccctgcag tggggctgct gaggctgcca 500
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ctggggcttc gtgtctgact ttgaggagct gccgctgga ctgatggagg 600
ccaaggtccg agtgcctgac ccgacgtct gcaacagctc ctggaagggc 650
cacctgacac ttaccatgct ctgcaccgc agtggggaca gccacagacg 700
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gccgctccag gcctggaatg ttccgtggct gggccccacg ggaagcctga 1000
tgttcagggg tgggggtggga cgggcagcgg tggggcacac ccattccaca 1050
tgcaaagggc agaagcaaac ccagtaaaat gttaactgac aaaaaaaaaa 1100
aaaaaaaaa gaaa 1114

<210> 272
<211> 283
<212> PRT
<213> Homo Sapien

<400> 272
Met Gly Leu Gly Leu Arg Gly Trp Gly Arg Pro Leu Leu Thr Val
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Ala Thr Ala Leu Met Leu Pro Val Lys Pro Pro Ala Gly Ser Trp
20 25 30
Gly Ala Gln Ile Ile Gly Gly His Glu Val Thr Pro His Ser Arg
35 40 45

Pro Tyr Met Ala Ser Val Arg Phe Gly Gly Gln His His Cys Gly
50 55 60

Gly Phe Leu Leu Arg Ala Arg Trp Val Val Ser Ala Ala His Cys
65 70 75

Phe Ser His Arg Asp Leu Arg Thr Gly Leu Val Val Leu Gly Ala
80 85 90

His Val Leu Ser Thr Ala Glu Pro Thr Gln Gln Val Phe Gly Ile
95 100 105

Asp Ala Leu Thr Thr His Pro Asp Tyr His Pro Met Thr His Ala
110 115 120

Asn Asp Ile Cys Leu Leu Arg Leu Asn Gly Ser Ala Val Leu Gly
125 130 135

Pro Ala Val Gly Leu Leu Arg Leu Pro Gly Arg Arg Ala Arg Pro
140 145 150

Pro Thr Ala Gly Thr Arg Cys Arg Val Ala Gly Trp Gly Phe Val
155 160 165

Ser Asp Phe Glu Glu Leu Pro Pro Gly Leu Met Glu Ala Lys Val
170 175 180

Arg Val Leu Asp Pro Asp Val Cys Asn Ser Ser Trp Lys Gly His
185 190 195

Leu Thr Leu Thr Met Leu Cys Thr Arg Ser Gly Asp Ser His Arg
200 205 210

Arg Gly Phe Cys Ser Ala Asp Ser Gly Gly Pro Leu Val Cys Arg
215 220 225

Asn Arg Ala His Gly Leu Val Ser Phe Ser Gly Leu Trp Cys Gly
230 235 240

Asp Pro Lys Thr Pro Asp Val Tyr Thr Gln Val Ser Ala Phe Val
245 250 255

Ala Trp Ile Trp Asp Val Val Arg Arg Ser Ser Pro Gln Pro Gly
260 265 270

Pro Leu Pro Gly Thr Thr Arg Pro Pro Gly Glu Ala Ala
275 280

<210> 273

<211> 2249

<212> DNA

<213> Homo Sapien

<400> 273

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ctggcggtgc tggcgctcgg gacaggagac ccagaaaggg ctgcggctcg 100

gctggctgtc ctgtcctggg gggagataag tgggtggcca acaagtggat 1600
 acatgagtat ggacaggaat tccgcagacc ctgcagctcc agccctgaag 1650
 actgaactgt tggcagagag aagctgggtg agtcctgtgg ctttccagag 1700
 aagccaggag ccaaaagctg gggtaggaga ggagaaagca gagcagcctc 1750
 ctggaagaag gccttgtcag ctttgtctgt gcctcgcaaa tcagaggcaa 1800
 gggagagggtt gttaccaggg gacactgaga atgtacattt gatctgcccc 1850
 agccacggaa gtcagagtag gatgcacagt acaaaggagg ggggagtgga 1900
 ggcttgagag ggaagtttct ggagttcaga tactctctgt tgggaacagg 1950
 acatctcaac agtctcaggt tcgatcagtg ggtcttttgg cactttgaac 2000
 cttgaccaca gggaccaaga agtggcaatg aggacacctg caggaggggc 2050
 tagcctgact ccagaaactt taagactttc tccccactgc cttctgctgc 2100
 agcccaagca gggagtgtcc ccctcccaga agcatatccc agatgagtgg 2150
 tacattatat aaggattttt ttttaagttga aaacaacttt cttttctttt 2200
 tgtatgatgg ttttttaaca cagtcattaa aaatgtttat aaatcaaaa 2249

<210> 274

<211> 544

<212> PRT

<213> Homo Sapien

<400> 274

Met	Gly	Pro	Gly	Ala	Arg	Leu	Ala	Ala	Leu	Leu	Ala	Val	Leu	Ala
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Leu	Gly	Thr	Gly	Asp	Pro	Glu	Arg	Ala	Ala	Ala	Arg	Gly	Asp	Thr
				20					25					30
Phe	Ser	Ala	Leu	Thr	Ser	Val	Ala	Arg	Ala	Leu	Ala	Pro	Glu	Arg
				35					40					45
Arg	Leu	Leu	Gly	Leu	Leu	Arg	Arg	Tyr	Leu	Arg	Gly	Glu	Glu	Ala
				50					55					60
Arg	Leu	Arg	Asp	Leu	Thr	Arg	Phe	Tyr	Asp	Lys	Val	Leu	Ser	Leu
				65					70					75
His	Glu	Asp	Ser	Thr	Thr	Pro	Val	Ala	Asn	Pro	Leu	Leu	Ala	Phe
				80					85					90
Thr	Leu	Ile	Lys	Arg	Leu	Gln	Ser	Asp	Trp	Arg	Asn	Val	Val	His
				95					100					105
Ser	Leu	Glu	Ala	Ser	Glu	Asn	Ile	Arg	Ala	Leu	Lys	Asp	Gly	Tyr
				110					115					120

Glu	Lys	Val	Glu	Gln	Asp	Leu	Pro	Ala	Phe	Glu	Asp	Leu	Glu	Gly	125	130	135
Ala	Ala	Arg	Ala	Leu	Met	Arg	Leu	Gln	Asp	Val	Tyr	Met	Leu	Asn	140	145	150
Val	Lys	Gly	Leu	Ala	Arg	Gly	Val	Phe	Gln	Arg	Val	Thr	Gly	Ser	155	160	165
Ala	Ile	Thr	Asp	Leu	Tyr	Ser	Pro	Lys	Arg	Leu	Phe	Ser	Leu	Thr	170	175	180
Gly	Asp	Asp	Cys	Phe	Gln	Val	Gly	Lys	Val	Ala	Tyr	Asp	Met	Gly	185	190	195
Asp	Tyr	Tyr	His	Ala	Ile	Pro	Trp	Leu	Glu	Glu	Ala	Val	Ser	Leu	200	205	210
Phe	Arg	Gly	Ser	Tyr	Gly	Glu	Trp	Lys	Thr	Glu	Asp	Glu	Ala	Ser	215	220	225
Leu	Glu	Asp	Ala	Leu	Asp	His	Leu	Ala	Phe	Ala	Tyr	Phe	Arg	Ala	230	235	240
Gly	Asn	Val	Ser	Cys	Ala	Leu	Ser	Leu	Ser	Arg	Glu	Phe	Leu	Leu	245	250	255
Tyr	Ser	Pro	Asp	Asn	Lys	Arg	Met	Ala	Arg	Asn	Val	Leu	Lys	Tyr	260	265	270
Glu	Arg	Leu	Leu	Ala	Glu	Ser	Pro	Asn	His	Val	Val	Ala	Glu	Ala	275	280	285
Val	Ile	Gln	Arg	Pro	Asn	Ile	Pro	His	Leu	Gln	Thr	Arg	Asp	Thr	290	295	300
Tyr	Glu	Gly	Leu	Cys	Gln	Thr	Leu	Gly	Ser	Gln	Pro	Thr	Leu	Tyr	305	310	315
Gln	Ile	Pro	Ser	Leu	Tyr	Cys	Ser	Tyr	Glu	Thr	Asn	Ser	Asn	Ala	320	325	330
Tyr	Leu	Leu	Leu	Gln	Pro	Ile	Arg	Lys	Glu	Val	Ile	His	Leu	Glu	335	340	345
Pro	Tyr	Ile	Ala	Leu	Tyr	His	Asp	Phe	Val	Ser	Asp	Ser	Glu	Ala	350	355	360
Gln	Lys	Ile	Arg	Glu	Leu	Ala	Glu	Pro	Trp	Leu	Gln	Arg	Ser	Val	365	370	375
Val	Ala	Ser	Gly	Glu	Lys	Gln	Leu	Gln	Val	Glu	Tyr	Arg	Ile	Ser	380	385	390
Lys	Ser	Ala	Trp	Leu	Lys	Asp	Thr	Val	Asp	Pro	Lys	Leu	Val	Thr	395	400	405
Leu	Asn	His	Arg	Ile	Ala	Ala	Leu	Thr	Gly	Leu	Asp	Val	Arg	Pro			

410	415	420
Pro Tyr Ala Glu Tyr Leu Gln Val Val	Asn Tyr Gly Ile Gly Gly	
425	430	435
His Tyr Glu Pro His Phe Asp His Ala	Thr Ser Pro Ser Ser Pro	
440	445	450
Leu Tyr Arg Met Lys Ser Gly Asn Arg	Val Ala Thr Phe Met Ile	
455	460	465
Tyr Leu Ser Ser Val Glu Ala Gly Gly	Ala Thr Ala Phe Ile Tyr	
470	475	480
Ala Asn Leu Ser Val Pro Val Val Arg	Asn Ala Ala Leu Phe Trp	
485	490	495
Trp Asn Leu His Arg Ser Gly Glu Gly	Asp Ser Asp Thr Leu His	
500	505	510
Ala Gly Cys Pro Val Leu Val Gly Asp	Lys Trp Val Ala Asn Lys	
515	520	525
Trp Ile His Glu Tyr Gly Gln Glu Phe	Arg Arg Pro Cys Ser Ser	
530	535	540
Ser Pro Glu Asp		

<210> 275
 <211> 1915
 <212> DNA
 <213> Homo Sapien

<400> 275
 ggcaacatgg ctcagcagggc ttgccccaga gccatggcaa agaattggact 50
 tgtaatttgc atccttggtga tcaccttact cctggaccag accaccagcc 100
 acacatccag attaaaagcc aggaagcaca gcaaacgtcg agtgagagac 150
 aaggatggag atctgaagac tcaaattgaa aagctctgga cagaagtcaa 200
 tgccttgaag gaaattcaag ccctgcagac agtctgtctc cgaggcacta 250
 aagttcacia gaaatgctac cttgcttcag aaggtttgaa gcatttccat 300
 gaggccaatg aagactgcat ttccaaagga ggaatcctgg ttatccccag 350
 gaactccgac gaaatcaacg ccctccaaga ctatggtaaa aggagcctgc 400
 caggtgtcaa tgacttttgg ctgggcatca atgacatggc cacggaaggc 450
 aagtttgttg acgtcaacgg aatcgctatc tccttcctca actgggaccg 500
 tgcacagcct aacgggtggc agcgagaaaa ctgtgtcctg ttctocccat 550
 cagctcaggg caagtggagt gatgaggcct gtcgcagcag caagagatac 600

atatgogagt tcaccatccc taaataggtc tttctccaat gtgtcctcca 650
 agcaagattc atcataactt atagggttcat gatctctaag atcaagtaaa 700
 aatcataatt tttacttatt aaaaaattgc aacacaagat caatgtccat 750
 agcaatatga tagcatcagc caattttgct aacacatttc tttgggattt 800
 tgcccttccct ggggtatagg ggatcagaaa tattgatcca tgtgcacgca 850
 gataaaatgg cttctgctaa acagactaaa atctttctct ctagtctttc 900
 tcacttgtag aaaccagtt tgttttcaaa aaatcacagt agcaatgcaa 950
 ctcatcactc tagaaaagca agcttaggct acctgaaaga ttttcccttg 1000
 gaagtttagc gtatgtttga ctaacaaaaa ttccctacat cagagactct 1050
 aggtgctata taatccaaaa acttttcagc ctgttgctca ttctgtcca 1100
 tgctggcaat aataccttgt cagccatta ccttatttt gaattgctcc 1150
 atctcctggg gggacttgta tcttgctctgc catatcagaa cacaaacccc 1200
 tgaagagggt ctgatttgat tttttttttt tcttcatgcc tacccttttt 1250
 ttggaagttt ccagccgcaa tttgaaatga aatgacaagg tgtatatattg 1300
 atcaattttc attcccacca ttgcattaca acctctaact taaatgggta 1350
 accctaaggc atatcaaaga agcagattgc atgataaacg gaaatagaaa 1400
 aaaagaacct acattttatt tgcttttagc tcttactct caccttttat 1450
 gagattgaga gtggacttac atttcctttt ttacattttc gtatatttat 1500
 ttttttttagc catcattata tgtttaagtc tattatgggc aaccaatctt 1550
 tggaagctga aaactgaatt taaagaatgc tatcttgga aattgcatac 1600
 gtctgtgcaa tttttttatt tgccctagtc tattctgctt gtttaactag 1650
 attgtacaaa ataacttcat tgcttaatat caaattacaa agtttagact 1700
 tggagggaaa tgggcttttt agaagcaaac aattttaaat atattttggt 1750
 cttcaaataa atagtgttta aacattgaat gtgttttggt aacaatatcc 1800
 cactttgcaa actttaacta cacatgcttg gaattaaagt ttagctgttt 1850
 tcattgctca ataataaagc ctgaattctg atcaataaaa aaaaaaaaaa 1900
 aaaaaaaaaa aaaaa 1915

<210> 276
 <211> 206
 <212> PRT
 <213> Homo Sapien

<400> 276

Met	Ala	Gln	Gln	Ala	Cys	Pro	Arg	Ala	Met	Ala	Lys	Asn	Gly	Leu	
1				5					10					15	
Val	Ile	Cys	Ile	Leu	Val	Ile	Thr	Leu	Leu	Leu	Asp	Gln	Thr	Thr	
				20					25					30	
Ser	His	Thr	Ser	Arg	Leu	Lys	Ala	Arg	Lys	His	Ser	Lys	Arg	Arg	
				35					40					45	
Val	Arg	Asp	Lys	Asp	Gly	Asp	Leu	Lys	Thr	Gln	Ile	Glu	Lys	Leu	
				50					55					60	
Trp	Thr	Glu	Val	Asn	Ala	Leu	Lys	Glu	Ile	Gln	Ala	Leu	Gln	Thr	
				65					70					75	
Val	Cys	Leu	Arg	Gly	Thr	Lys	Val	His	Lys	Lys	Cys	Tyr	Leu	Ala	
				80					85					90	
Ser	Glu	Gly	Leu	Lys	His	Phe	His	Glu	Ala	Asn	Glu	Asp	Cys	Ile	
				95					100					105	
Ser	Lys	Gly	Gly	Ile	Leu	Val	Ile	Pro	Arg	Asn	Ser	Asp	Glu	Ile	
				110					115					120	
Asn	Ala	Leu	Gln	Asp	Tyr	Gly	Lys	Arg	Ser	Leu	Pro	Gly	Val	Asn	
				125					130					135	
Asp	Phe	Trp	Leu	Gly	Ile	Asn	Asp	Met	Val	Thr	Glu	Gly	Lys	Phe	
				140					145					150	
Val	Asp	Val	Asn	Gly	Ile	Ala	Ile	Ser	Phe	Leu	Asn	Trp	Asp	Arg	
				155					160					165	
Ala	Gln	Pro	Asn	Gly	Gly	Lys	Arg	Glu	Asn	Cys	Val	Leu	Phe	Ser	
				170					175					180	
Gln	Ser	Ala	Gln	Gly	Lys	Trp	Ser	Asp	Glu	Ala	Cys	Arg	Ser	Ser	
				185					190					195	
Lys	Arg	Tyr	Ile	Cys	Glu	Phe	Thr	Ile	Pro	Lys					
				200					205						

<210> 277

<211> 1778

<212> DNA

<213> Homo Sapien

<400> 277

gagataggga gtctggggttt aagttcctgc tccatctcag gagccctgc 50

ttccaccctt aggaagccac cagactccac ggtgtggggc caatcaggtg 100

gaatcgggcc tggcaggtgg ggccacgagc gctgggtgag ggaccgagcc 150

ggagagcccc ggagcccccg taaccgcgcg ggggagcgcc caggatgccg 200

cgcgggggact cggagcaggt gcgctactgc gcgcgcttct cctacctctg 250

gctcaagttt	tcacttatca	tctattccac	cgtgttctgg	ctgattgggg	300
ccctggtcct	gtctgtgggc	atctatgcag	aggttgagcg	gcagaaatat	350
aaaacccttg	aaagtgcctt	cctggctcca	gccatcatcc	tcatoctoct	400
gggcgtcgtc	atgttcatgg	tctccttcat	tgggtgtgctg	gcgtccctcc	450
gtgacaacct	gtaccttctc	caagcattca	tgtacatoct	tgggatctgc	500
ctcatcatgg	agctcattgg	tggcgtgggtg	gccttgacct	tccggaacca	550
gaccattgac	ttcctgaacg	acaacattcg	aagaggaatt	gagaactact	600
atgatgatct	ggacttcaaa	aacatcatgg	actttgttca	gaaaaagttc	650
aagtgtctgtg	gcgggggagga	ctaccgagat	tggagcaaga	atcagtacca	700
cgactgcagt	gcccctggac	ccctggcctg	tggggtgccc	tacacctgct	750
gcatcaggaa	cacgacagaa	gttgtcaaca	ccatgtgtgg	ctacaaaact	800
atcgacaagg	agcgtttcag	tgtgcaggat	gtcatctacg	tgcggggctg	850
caccaacgcc	gtgatcatct	ggttcatgga	caactacacc	atcatggcgt	900
gcatectcct	gggcatcctg	cttccccagt	tcctgggggt	gctgctgacg	950
ctgctgtaca	tcacccgggt	ggaggacatc	atcatggagc	actctgtcac	1000
tgatgggctc	ctggggcccg	gtgccaagcc	cagcgtggag	gcggcaggca	1050
cgggatgctg	cttgtgctac	cccaattagg	gccagcctg	ccatggcagc	1100
tccaacaagg	accgtctggg	atagcacctc	tcagtcaaca	tcgtggggct	1150
ggacagggct	gcggccctc	tgcccacact	cagtactgac	caaagccagg	1200
gctgtgtgtg	cctgtgtgta	ggtccacagg	cctctgcctc	cccagggagc	1250
agagcctggg	cctcccctaa	gaggctttcc	ccgaggcagc	tctggaatct	1300
gtgcccacct	ggggcctggg	gaacaaggcc	ctcctttctc	caggcctggg	1350
ctacagggga	gggagagcct	gaggctctgc	tcagggccca	tttcatctct	1400
ggcagtgcct	tggcggtggt	attcaaggca	gttttgtagc	acctgtaatt	1450
ggggagaggg	agtgtgcccc	tcggggcagg	agggaagggc	atctggggaa	1500
gggcaggagg	gaagagctgt	ccatgcagcc	acgcccattg	ccaggttggc	1550
ctctttctcag	cctcccagg	gccttgagcc	ctcttgcaag	ggcggctgct	1600
tccttgagcc	tagttttttt	ttacgtgatt	tttgtaacat	tcattttttt	1650
gtacagataa	caggagtttc	tgaactaatca	aagctgggat	ttccccgc	1700

gtcttattct tgcccttccc ccaaccagtt tgttaatcaa acaataaaaa 1750

catgttttgt tttgttttta aaaaaaaa 1778

<210> 278

<211> 294

<212> PRT

<213> Homo Sapien

<400> 278

Met	Pro	Arg	Gly	Asp	Ser	Glu	Gln	Val	Arg	Tyr	Cys	Ala	Arg	Phe
1				5					10					15

Ser	Tyr	Leu	Trp	Leu	Lys	Phe	Ser	Leu	Ile	Ile	Tyr	Ser	Thr	Val
				20					25					30

Phe	Trp	Leu	Ile	Gly	Ala	Leu	Val	Leu	Ser	Val	Gly	Ile	Tyr	Ala
				35					40					45

Glu	Val	Glu	Arg	Gln	Lys	Tyr	Lys	Thr	Leu	Glu	Ser	Ala	Phe	Leu
				50					55					60

Ala	Pro	Ala	Ile	Ile	Leu	Ile	Leu	Leu	Gly	Val	Val	Met	Phe	Met
				65					70					75

Val	Ser	Phe	Ile	Gly	Val	Leu	Ala	Ser	Leu	Arg	Asp	Asn	Leu	Tyr
				80					85					90

Leu	Leu	Gln	Ala	Phe	Met	Tyr	Ile	Leu	Gly	Ile	Cys	Leu	Ile	Met
				95					100					105

Glu	Leu	Ile	Gly	Gly	Val	Val	Ala	Leu	Thr	Phe	Arg	Asn	Gln	Thr
				110					115					120

Ile	Asp	Phe	Leu	Asn	Asp	Asn	Ile	Arg	Arg	Gly	Ile	Glu	Asn	Tyr
				125					130					135

Tyr	Asp	Asp	Leu	Asp	Phe	Lys	Asn	Ile	Met	Asp	Phe	Val	Gln	Lys
				140					145					150

Lys	Phe	Lys	Cys	Cys	Gly	Gly	Glu	Asp	Tyr	Arg	Asp	Trp	Ser	Lys
				155					160					165

Asn	Gln	Tyr	His	Asp	Cys	Ser	Ala	Pro	Gly	Pro	Leu	Ala	Cys	Gly
				170					175					180

Val	Pro	Tyr	Thr	Cys	Cys	Ile	Arg	Asn	Thr	Thr	Glu	Val	Val	Asn
				185					190					195

Thr	Met	Cys	Gly	Tyr	Lys	Thr	Ile	Asp	Lys	Glu	Arg	Phe	Ser	Val
				200					205					210

Gln	Asp	Val	Ile	Tyr	Val	Arg	Gly	Cys	Thr	Asn	Ala	Val	Ile	Ile
				215					220					225

Trp	Phe	Met	Asp	Asn	Tyr	Thr	Ile	Met	Ala	Cys	Ile	Leu	Leu	Gly
				230					235					240

Ile	Leu	Leu	Pro	Gln	Phe	Leu	Gly	Val	Leu	Leu	Thr	Leu	Leu	Tyr
				245					250					255
Ile	Thr	Arg	Val	Glu	Asp	Ile	Ile	Met	Glu	His	Ser	Val	Thr	Asp
				260					265					270
Gly	Leu	Leu	Gly	Pro	Gly	Ala	Lys	Pro	Ser	Val	Glu	Ala	Ala	Gly
				275					280					285
Thr	Gly	Cys	Cys	Leu	Cys	Tyr	Pro	Asn						
				290										

<210> 279
 <211> 1636
 <212> DNA
 <213> Homo Sapien

<400> 279
 gaggagcggg ccgaggactc cagcgtgccc aggtctggca tcctgcactt 50
 gctgccctct gacacctggg aagatggccg gcccgaggac cttcaccctt 100
 ctctgtggtt tgctggcagc caccttgatc caagccaccc tcagtccac 150
 tgcagttctc atcctcggcc caaaagtcac caaagaaaag ctgacacagg 200
 agctgaagga ccacaacgcc accagcatcc tgcagcagct gccgctgctc 250
 agtgccatgc gggaaaagcc agccggaggc atccctgtgc tgggcagcct 300
 ggtgaacacc gtcctgaagc acatcatctg gctgaaggtc atcacagcta 350
 acatcctcca gctgcagggtg aagccctcgg ccaatgacca ggagctgcta 400
 gtcaagatcc ccctggacat ggtggctgga ttcaacacgc ccctgggtcaa 450
 gaccatcgtg gagttccaca tgacgactga ggccaagcc accatccgca 500
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 accagccatg ggagcctgcg catccaactg ctgtataagc tctccttcc 600
 ggtgaacgcc ttagctaagc aggtcatgaa cctcctagtg ccatccctgc 650
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 ggcattgtatg cagacctcct gcagctgggtg aagggtgcca tttccctcag 750
 cattgaccgt ctggagtttg accttctgta tcctgccatc aagggtgaca 800
 ccattcagct ctacctgggg gccaaattgt tggactcaca gggaaagggtg 850
 accaagtgggt tcaataactc tgcagcttcc ctgacaatgc ccaccctgga 900
 caacatcccg ttcagcctca tcgtgagtca ggacgtgggtg aaagctgcag 950
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cttcctgaga gtgcccacg gctgaagtca agcatcgggc tgatcaatga 1050
aaaggctgca gataagctgg gatctacca gatcgtgaag atcctaactc 1100
aggacactcc cgaggttttt atagaccaag gccatgcca ggtggcccaa 1150
ctgatcgtgc tggaagtgtt tccctccagt gaagccctcc gccctttgtt 1200
caccctgggc atcgaagcca gctcgggaagc tcagttttac accaaaggtg 1250
accaacttat actcaacttg aataacatca gctctgatcg gatccagctg 1300
atgaactctg ggattggctg gttccaacct gatgttctga aaaacatcat 1350
cactgagatc atccactcca tccgtctgcc gaaccagaat ggcaaattaa 1400
gatctggggg cccagtgtca ttggtgaagg ccttgggatt cgaggcagct 1450
gagtcctcac tgaccaagga tgcccttgtg cttactccag cctccttgtg 1500
gaaaccacgc tctcctgtct cccagtgaag acttggatgg cagccatcag 1550
ggaaggctgg gtcccagctg ggagtatggg tgtgagctct atagaccatc 1600
cctctctgca atcaataaac acttgctgtg gaaaaa 1636

<210> 280

<211> 484

<212> PRT

<213> Homo Sapien

<400> 280

Met	Ala	Gly	Pro	Trp	Thr	Phe	Thr	Leu	Leu	Cys	Gly	Leu	Leu	Ala
1				5					10					15
Ala	Thr	Leu	Ile	Gln	Ala	Thr	Leu	Ser	Pro	Thr	Ala	Val	Leu	Ile
			20					25					30	
Leu	Gly	Pro	Lys	Val	Ile	Lys	Glu	Lys	Leu	Thr	Gln	Glu	Leu	Lys
			35					40					45	
Asp	His	Asn	Ala	Thr	Ser	Ile	Leu	Gln	Gln	Leu	Pro	Leu	Leu	Ser
			50					55					60	
Ala	Met	Arg	Glu	Lys	Pro	Ala	Gly	Gly	Ile	Pro	Val	Leu	Gly	Ser
			65					70					75	
Leu	Val	Asn	Thr	Val	Leu	Lys	His	Ile	Ile	Trp	Leu	Lys	Val	Ile
			80					85					90	
Thr	Ala	Asn	Ile	Leu	Gln	Leu	Gln	Val	Lys	Pro	Ser	Ala	Asn	Asp
			95					100					105	
Gln	Glu	Leu	Leu	Val	Lys	Ile	Pro	Leu	Asp	Met	Val	Ala	Gly	Phe
			110					115					120	
Asn	Thr	Pro	Leu	Val	Lys	Thr	Ile	Val	Glu	Phe	His	Met	Thr	Thr
			125					130					135	

Glu Ala Gln Ala Thr Ile Arg Met Asp Thr Ser Ala Ser Gly Pro	140	145	150
Thr Arg Leu Val Leu Ser Asp Cys Ala Thr Ser His Gly Ser Leu	155	160	165
Arg Ile Gln Leu Leu Tyr Lys Leu Ser Phe Leu Val Asn Ala Leu	170	175	180
Ala Lys Gln Val Met Asn Leu Leu Val Pro Ser Leu Pro Asn Leu	185	190	195
Val Lys Asn Gln Leu Cys Pro Val Ile Glu Ala Ser Phe Asn Gly	200	205	210
Met Tyr Ala Asp Leu Leu Gln Leu Val Lys Val Pro Ile Ser Leu	215	220	225
Ser Ile Asp Arg Leu Glu Phe Asp Leu Leu Tyr Pro Ala Ile Lys	230	235	240
Gly Asp Thr Ile Gln Leu Tyr Leu Gly Ala Lys Leu Leu Asp Ser	245	250	255
Gln Gly Lys Val Thr Lys Trp Phe Asn Asn Ser Ala Ala Ser Leu	260	265	270
Thr Met Pro Thr Leu Asp Asn Ile Pro Phe Ser Leu Ile Val Ser	275	280	285
Gln Asp Val Val Lys Ala Ala Val Ala Ala Val Leu Ser Pro Glu	290	295	300
Glu Phe Met Val Leu Leu Asp Ser Val Leu Pro Glu Ser Ala His	305	310	315
Arg Leu Lys Ser Ser Ile Gly Leu Ile Asn Glu Lys Ala Ala Asp	320	325	330
Lys Leu Gly Ser Thr Gln Ile Val Lys Ile Leu Thr Gln Asp Thr	335	340	345
Pro Glu Phe Phe Ile Asp Gln Gly His Ala Lys Val Ala Gln Leu	350	355	360
Ile Val Leu Glu Val Phe Pro Ser Ser Glu Ala Leu Arg Pro Leu	365	370	375
Phe Thr Leu Gly Ile Glu Ala Ser Ser Glu Ala Gln Phe Tyr Thr	380	385	390
Lys Gly Asp Gln Leu Ile Leu Asn Leu Asn Asn Ile Ser Ser Asp	395	400	405
Arg Ile Gln Leu Met Asn Ser Gly Ile Gly Trp Phe Gln Pro Asp	410	415	420
Val Leu Lys Asn Ile Ile Thr Glu Ile Ile His Ser Ile Leu Leu			

425	430	435
Pro Asn Gln Asn Gly Lys Leu Arg Ser	Gly Val Pro Val Ser Leu	
440	445	450
Val Lys Ala Leu Gly Phe Glu Ala Ala	Glu Ser Ser Leu Thr Lys	
455	460	465
Asp Ala Leu Val Leu Thr Pro Ala Ser	Leu Trp Lys Pro Ser Ser	
470	475	480
Pro Val Ser Gln		

<210> 281
 <211> 1732
 <212> DNA
 <213> Homo Sapien

<400> 281
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 cttagacctc ccttctgccc ctcttttctt gccaccgct gcttcttggc 150
 ccttctccga ccccgctcta gcagcagacc tcttgggggc tgtgggttga 200
 tctgtggccc ctgtgectcc gtgtcctttt cgtctccctt cctcccgact 250
 ccgctcccgc accagcggcc tgaccctggg gaaaggatgg ttcccgaggt 300
 gagggtcctc tctccttgc tgggactcgc gctgctctgg ttccccctgg 350
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 agatactccc ccggcgagag ctggcaccct tacttggagc cacaaggcct 450
 gatgtactgc ctgcgctgta cctgctcaga gggcgcccat gtgagttgtt 500
 accgcctcca ctgtccgcct gtccactgcc cccagcctgt gacggagcca 550
 cagcaatgct gtcccaagtg tgtggaacct cacactccct ctggactccg 600
 ggccccacca aagtccctgcc agcacaacgg gaccatgtac caacacggag 650
 agatcttcag tgcccatgag ctgttccctt cccgcctgcc caaccagtgt 700
 gtcctctgca gctgcacaga gggccagatc tactgcgggc tcacaacctg 750
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 aagcctgcaa agatgaggca agtgagcaat cggatgaaga ggacagtgtg 850
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ggccagtcca gacaaagtga ccaagacata acaaagacct aacagttgca 1650
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cattaccctc aaaaaaaaaa aaaaaaaaaa aa 1732

<210> 282
<211> 451
<212> PRT
<213> Homo Sapien

<400> 282
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35 40 45
Trp His Pro Tyr Leu Glu Pro Gln Gly Leu Met Tyr Cys Leu Arg
50 55 60
Cys Thr Cys Ser Glu Gly Ala His Val Ser Cys Tyr Arg Leu His
65 70 75
Cys Pro Pro Val His Cys Pro Gln Pro Val Thr Glu Pro Gln Gln
80 85 90
Cys Cys Pro Lys Cys Val Glu Pro His Thr Pro Ser Gly Leu Arg
95 100 105

Ala	Pro	Pro	Lys	Ser	Cys	Gln	His	Asn	Gly	Thr	Met	Tyr	Gln	His
				110					115					120
Gly	Glu	Ile	Phe	Ser	Ala	His	Glu	Leu	Phe	Pro	Ser	Arg	Leu	Pro
				125					130					135
Asn	Gln	Cys	Val	Leu	Cys	Ser	Cys	Thr	Glu	Gly	Gln	Ile	Tyr	Cys
				140					145					150
Gly	Leu	Thr	Thr	Cys	Pro	Glu	Pro	Gly	Cys	Pro	Ala	Pro	Leu	Pro
				155					160					165
Leu	Pro	Asp	Ser	Cys	Cys	Gln	Ala	Cys	Lys	Asp	Glu	Ala	Ser	Glu
				170					175					180
Gln	Ser	Asp	Glu	Glu	Asp	Ser	Val	Gln	Ser	Leu	His	Gly	Val	Arg
				185					190					195
His	Pro	Gln	Asp	Pro	Cys	Ser	Ser	Asp	Ala	Gly	Arg	Lys	Arg	Gly
				200					205					210
Pro	Gly	Thr	Pro	Ala	Pro	Thr	Gly	Leu	Ser	Ala	Pro	Leu	Ser	Phe
				215					220					225
Ile	Pro	Arg	His	Phe	Arg	Pro	Lys	Gly	Ala	Gly	Ser	Thr	Thr	Val
				230					235					240
Lys	Ile	Val	Leu	Lys	Glu	Lys	His	Lys	Lys	Ala	Cys	Val	His	Gly
				245					250					255
Gly	Lys	Thr	Tyr	Ser	His	Gly	Glu	Val	Trp	His	Pro	Ala	Phe	Arg
				260					265					270
Ala	Phe	Gly	Pro	Leu	Pro	Cys	Ile	Leu	Cys	Thr	Cys	Glu	Asp	Gly
				275					280					285
Arg	Gln	Asp	Cys	Gln	Arg	Val	Thr	Cys	Pro	Thr	Glu	Tyr	Pro	Cys
				290					295					300
Arg	His	Pro	Glu	Lys	Val	Ala	Gly	Lys	Cys	Cys	Lys	Ile	Cys	Pro
				305					310					315
Glu	Asp	Lys	Ala	Asp	Pro	Gly	His	Ser	Glu	Ile	Ser	Ser	Thr	Arg
				320					325					330
Cys	Pro	Lys	Ala	Pro	Gly	Arg	Val	Leu	Val	His	Thr	Ser	Val	Ser
				335					340					345
Pro	Ser	Pro	Asp	Asn	Leu	Arg	Arg	Phe	Ala	Leu	Glu	His	Glu	Ala
				350					355					360
Ser	Asp	Leu	Val	Glu	Ile	Tyr	Leu	Trp	Lys	Leu	Val	Lys	Asp	Glu
				365					370					375
Glu	Thr	Glu	Ala	Gln	Arg	Gly	Glu	Val	Pro	Gly	Pro	Arg	Pro	His
				380					385					390
Ser	Gln	Asn	Leu	Pro	Leu	Asp	Ser	Asp	Gln	Glu	Ser	Gln	Glu	Ala

	395		400		405
Arg Leu Pro Glu Arg Gly Thr Ala Leu Pro Thr Ala Arg Trp Pro					
	410		415		420
Pro Arg Arg Ser Leu Glu Arg Leu Pro Ser Pro Asp Pro Gly Ala					
	425		430		435
Glu Gly His Gly Gln Ser Arg Gln Ser Asp Gln Asp Ile Thr Lys					
	440		445		450

Thr

<210> 283
 <211> 2294
 <212> DNA
 <213> Homo Sapien

<400> 283
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 aatgaatggc ggagccgagc gcgccatgag gagcctgccg agcctgggcg 150
 gcctcgccct gttgtgtctg gccgcgcgcg ccgcccgcgt cgcctcagcc 200
 gcctcggcgg ggaatgtcac cgggtggcggc ggggcccgcg ggcaggtgga 250
 cgcgtcgccg ggccccgggt tgcggggcga gccagccac cccttccta 300
 gggcgacggc tcccacggcc caggccccga ggaccgggccc cccgcgcgcc 350
 accgtccacc gacccttggc tgcgacttct ccagcccagt ccccgagagac 400
 caccctctt tgggcgactg ctggaccctc ttccaccacc ttccagggcg 450
 cgctcggccc ctgcgcgacc acccctccgg cggcggaacg cacttcgacc 500
 acctctcagg cgccgaccag acccgcgcg accacccttt cgacgaccac 550
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 agaccacagg gcagtgtgag tgcggccag gttatcaggg gcttcactgt 800
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 gccatgtgac tgtagtcac atggagctct cagcataccg tgcaacaggt 900
 aagcaacaga ggtggaact gaagtttatt ttatttttagc aagggaacaa 950

WILLIAM B. BROWN, JR., President, 1977-1978

WILLIAM B. BROWN, JR., President, 1977-1978

WILLIAM B. BROWN, JR., President, 1977-1978

<213> Homo Sapien

<400> 285

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gtaaactgct gacgatgcag agttccgtga cggcgcagga aggcctgtgt 150
gtccatgtgc cctgctcctt ctccctacccc tcgcatggct ggattttaccc 200
tggcccagta gttcatggct actgggttccg ggaagggggcc aatacagacc 250
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gtatggagaa aggaagtata aaatggaatt ataaacatca ccggctctct 450
gtgaatgtga cagccttgac ccacaggccc aacatcctca tcccaggcac 500
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<210> 286

<211> 463

<212> PRT

<213> Homo Sapien

<400> 286

Met	Leu	Leu	Leu	Leu	Leu	Pro	Leu	Leu	Trp	Gly	Arg	Glu	Arg	Ala	1	5	10	15
Glu	Gly	Gln	Thr	Ser	Lys	Leu	Leu	Thr	Met	Gln	Ser	Ser	Val	Thr	20	25	30	
Val	Gln	Glu	Gly	Leu	Cys	Val	His	Val	Pro	Cys	Ser	Phe	Ser	Tyr	35	40	45	
Pro	Ser	His	Gly	Trp	Ile	Tyr	Pro	Gly	Pro	Val	Val	His	Gly	Tyr	50	55	60	
Trp	Phe	Arg	Glu	Gly	Ala	Asn	Thr	Asp	Gln	Asp	Ala	Pro	Val	Ala	65	70	75	
Thr	Asn	Asn	Pro	Ala	Arg	Ala	Val	Trp	Glu	Glu	Thr	Arg	Asp	Arg	80	85	90	
Phe	His	Leu	Leu	Gly	Asp	Pro	His	Thr	Lys	Asn	Cys	Thr	Leu	Ser	95	100	105	
Ile	Arg	Asp	Ala	Arg	Arg	Ser	Asp	Ala	Gly	Arg	Tyr	Phe	Phe	Arg	110	115	120	
Met	Glu	Lys	Gly	Ser	Ile	Lys	Trp	Asn	Tyr	Lys	His	His	Arg	Leu	125	130	135	
Ser	Val	Asn	Val	Thr	Ala	Leu	Thr	His	Arg	Pro	Asn	Ile	Leu	Ile	140	145	150	
Pro	Gly	Thr	Leu	Glu	Ser	Gly	Cys	Pro	Gln	Asn	Leu	Thr	Cys	Ser	155	160	165	
Val	Pro	Trp	Ala	Cys	Glu	Gln	Gly	Thr	Pro	Pro	Met	Ile	Ser	Trp	170	175	180	
Ile	Gly	Thr	Ser	Val	Ser	Pro	Leu	Asp	Pro	Ser	Thr	Thr	Arg	Ser	185	190	195	
Ser	Val	Leu	Thr	Leu	Ile	Pro	Gln	Pro	Gln	Asp	His	Gly	Thr	Ser				

Leu Thr Cys Gln Val Thr Phe Pro Gly	Ala Ser Val Thr Thr Asn
215	220 225
Lys Thr Val His Leu Asn Val Ser Tyr	Pro Pro Gln Asn Leu Thr
230	235 240
Met Thr Val Phe Gln Gly Asp Gly Thr	Val Ser Thr Val Leu Gly
245	250 255
Asn Gly Ser Ser Leu Ser Leu Pro Glu	Gly Gln Ser Leu Arg Leu
260	265 270
Val Cys Ala Val Asp Ala Val Asp Ser	Asn Pro Pro Ala Arg Leu
275	280 285
Ser Leu Ser Trp Arg Gly Leu Thr Leu	Cys Pro Ser Gln Pro Ser
290	295 300
Asn Pro Gly Val Leu Glu Leu Pro Trp	Val His Leu Arg Asp Ala
305	310 315
Ala Glu Phe Thr Cys Arg Ala Gln Asn	Pro Leu Gly Ser Gln Gln
320	325 330
Val Tyr Leu Asn Val Ser Leu Gln Ser	Lys Ala Thr Ser Gly Val
335	340 345
Thr Gln Gly Val Val Gly Gly Ala Gly	Ala Thr Ala Leu Val Phe
350	355 360
Leu Ser Phe Cys Val Ile Phe Val Val	Val Arg Ser Cys Arg Lys
365	370 375
Lys Ser Ala Arg Pro Ala Ala Gly Val	Gly Asp Thr Gly Ile Glu
380	385 390
Asp Ala Asn Ala Val Arg Gly Ser Ala	Ser Gln Gly Pro Leu Thr
395	400 405
Glu Pro Trp Ala Glu Asp Ser Pro Pro	Asp Gln Pro Pro Pro Ala
410	415 420
Ser Ala Arg Ser Ser Val Gly Glu Gly	Glu Leu Gln Tyr Ala Ser
425	430 435
Leu Ser Phe Gln Met Val Lys Pro Trp	Asp Ser Arg Gly Gln Glu
440	445 450
Ala Thr Asp Thr Glu Tyr Ser Glu Ile	Lys Ile His Arg
455	460

<210> 287
 <211> 2210
 <212> DNA
 <213> Homo Sapien

<400> 287

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aaaaaaaaa 2210

<210> 288
<211> 372
<212> PRT
<213> Homo Sapien

<400> 288
Met Lys Tyr Leu Arg His Arg Arg Pro Asn Ala Thr Leu Ile Leu
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Ala Ile Gly Ala Phe Thr Leu Leu Leu Phe Ser Leu Leu Val Ser
20 25 30
Pro Pro Thr Cys Lys Val Gln Glu Gln Pro Pro Ala Ile Pro Glu
35 40 45
Ala Leu Ala Trp Pro Thr Pro Pro Thr Arg Pro Ala Pro Ala Pro
50 55 60
Cys His Ala Asn Thr Ser Met Val Thr His Pro Asp Phe Ala Thr
65 70 75
Gln Pro Gln His Val Gln Asn Phe Leu Leu Tyr Arg His Cys Arg
80 85 90
His Phe Pro Leu Leu Gln Asp Val Pro Pro Ser Lys Cys Ala Gln
95 100 105

Pro	Val	Phe	Leu	Leu	Leu	Val	Ile	Lys	Ser	Ser	Pro	Ser	Asn	Tyr	
			110						115					120	
Val	Arg	Arg	Glu	Leu	Leu	Arg	Arg	Thr	Trp	Gly	Arg	Glu	Arg	Lys	
			125						130					135	
Val	Arg	Gly	Leu	Gln	Leu	Arg	Leu	Leu	Phe	Leu	Val	Gly	Thr	Ala	
			140						145					150	
Ser	Asn	Pro	His	Glu	Ala	Arg	Lys	Val	Asn	Arg	Leu	Leu	Glu	Leu	
			155						160					165	
Glu	Ala	Gln	Thr	His	Gly	Asp	Ile	Leu	Gln	Trp	Asp	Phe	His	Asp	
			170						175					180	
Ser	Phe	Phe	Asn	Leu	Thr	Leu	Lys	Gln	Val	Leu	Phe	Leu	Gln	Trp	
			185						190					195	
Gln	Glu	Thr	Arg	Cys	Ala	Asn	Ala	Ser	Phe	Val	Leu	Asn	Gly	Asp	
			200						205					210	
Asp	Asp	Val	Phe	Ala	His	Thr	Asp	Asn	Met	Val	Phe	Tyr	Leu	Gln	
			215						220					225	
Asp	His	Asp	Pro	Gly	Arg	His	Leu	Phe	Val	Gly	Gln	Leu	Ile	Gln	
			230						235					240	
Asn	Val	Gly	Pro	Ile	Arg	Ala	Phe	Trp	Ser	Lys	Tyr	Tyr	Val	Pro	
			245						250					255	
Glu	Val	Val	Thr	Gln	Asn	Glu	Arg	Tyr	Pro	Pro	Tyr	Cys	Gly	Gly	
			260						265					270	
Gly	Gly	Phe	Leu	Leu	Ser	Arg	Phe	Thr	Ala	Ala	Ala	Leu	Arg	Arg	
			275						280					285	
Ala	Ala	His	Val	Leu	Asp	Ile	Phe	Pro	Ile	Asp	Asp	Val	Phe	Leu	
			290						295					300	
Gly	Met	Cys	Leu	Glu	Leu	Glu	Gly	Leu	Lys	Pro	Ala	Ser	His	Ser	
			305						310					315	
Gly	Ile	Arg	Thr	Ser	Gly	Val	Arg	Ala	Pro	Ser	Gln	His	Leu	Ser	
			320						325					330	
Ser	Phe	Asp	Pro	Cys	Phe	Tyr	Arg	Asp	Leu	Leu	Leu	Val	His	Arg	
			335						340					345	
Phe	Leu	Pro	Tyr	Glu	Met	Leu	Leu	Met	Trp	Asp	Ala	Leu	Asn	Gln	
			350						355					360	
Pro	Asn	Leu	Thr	Cys	Gly	Asn	Gln	Thr	Gln	Ile	Tyr				
			365						370						

<210> 289
 <211> 4842
 <212> DNA
 <213> Homo Sapien

<400> 289

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<210> 290
 <211> 1523
 <212> PRT
 <213> Homo Sapien

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 35 40 45
 Asp Cys His Gly Leu Gly Leu Arg Ala Val Pro Arg Gly Ile Pro
 50 55 60
 Arg Asn Ala Glu Arg Leu Asp Leu Asp Arg Asn Asn Ile Thr Arg
 65 70 75
 Ile Thr Lys Met Asp Phe Ala Gly Leu Lys Asn Leu Arg Val Leu
 80 85 90
 His Leu Glu Asp Asn Gln Val Ser Val Ile Glu Arg Gly Ala Phe
 95 100 105
 Gln Asp Leu Lys Gln Leu Glu Arg Leu Arg Leu Asn Lys Asn Lys
 110 115 120
 Leu Gln Val Leu Pro Glu Leu Leu Phe Gln Ser Thr Pro Lys Leu
 125 130 135
 Thr Arg Leu Asp Leu Ser Glu Asn Gln Ile Gln Gly Ile Pro Arg
 140 145 150
 Lys Ala Phe Arg Gly Ile Thr Asp Val Lys Asn Leu Gln Leu Asp
 155 160 165

Asn Asn His Ile Ser Cys Ile Glu Asp Gly Ala Phe Arg Ala Leu	170	175	180
Arg Asp Leu Glu Ile Leu Thr Leu Asn Asn Asn Ile Ser Arg	185	190	195
Ile Leu Val Thr Ser Phe Asn His Met Pro Lys Ile Arg Thr Leu	200	205	210
Arg Leu His Ser Asn His Leu Tyr Cys Asp Cys His Leu Ala Trp	215	220	225
Leu Ser Asp Trp Leu Arg Gln Arg Arg Thr Val Gly Gln Phe Thr	230	235	240
Leu Cys Met Ala Pro Val His Leu Arg Gly Phe Asn Val Ala Asp	245	250	255
Val Gln Lys Lys Glu Tyr Val Cys Pro Ala Pro His Ser Glu Pro	260	265	270
Pro Ser Cys Asn Ala Asn Ser Ile Ser Cys Pro Ser Pro Cys Thr	275	280	285
Cys Ser Asn Asn Ile Val Asp Cys Arg Gly Lys Gly Leu Met Glu	290	295	300
Ile Pro Ala Asn Leu Pro Glu Gly Ile Val Glu Ile Arg Leu Glu	305	310	315
Gln Asn Ser Ile Lys Ala Ile Pro Ala Gly Ala Phe Thr Gln Tyr	320	325	330
Lys Lys Leu Lys Arg Ile Asp Ile Ser Lys Asn Gln Ile Ser Asp	335	340	345
Ile Ala Pro Asp Ala Phe Gln Gly Leu Lys Ser Leu Thr Ser Leu	350	355	360
Val Leu Tyr Gly Asn Lys Ile Thr Glu Ile Ala Lys Gly Leu Phe	365	370	375
Asp Gly Leu Val Ser Leu Gln Leu Leu Leu Leu Asn Ala Asn Lys	380	385	390
Ile Asn Cys Leu Arg Val Asn Thr Phe Gln Asp Leu Gln Asn Leu	395	400	405
Asn Leu Leu Ser Leu Tyr Asp Asn Lys Leu Gln Thr Ile Ser Lys	410	415	420
Gly Leu Phe Ala Pro Leu Gln Ser Ile Gln Thr Leu His Leu Ala	425	430	435
Gln Asn Pro Phe Val Cys Asp Cys His Leu Lys Trp Leu Ala Asp	440	445	450
Tyr Leu Gln Asp Asn Pro Ile Glu Thr Ser Gly Ala Arg Cys Ser			

	455		460		465
Ser Pro Arg Arg	Leu Ala Asn Lys Arg	Ile Ser Gln Ile Lys Ser			
	470	475			480
Lys Lys Phe Arg	Cys Ser Gly Ser Glu Asp Tyr Arg Ser Arg Phe				
	485	490			495
Ser Ser Glu Cys	Phe Met Asp Leu Val Cys Pro Glu Lys Cys Arg				
	500	505			510
Cys Glu Gly Thr	Ile Val Asp Cys Ser Asn Gln Lys Leu Val Arg				
	515	520			525
Ile Pro Ser His	Leu Pro Glu Tyr Val Thr Asp Leu Arg Leu Asn				
	530	535			540
Asp Asn Glu Val	Ser Val Leu Glu Ala Thr Gly Ile Phe Lys Lys				
	545	550			555
Leu Pro Asn Leu	Arg Lys Ile Asn Leu Ser Asn Asn Lys Ile Lys				
	560	565			570
Glu Val Arg Glu	Gly Ala Phe Asp Gly Ala Ala Ser Val Gln Glu				
	575	580			585
Leu Met Leu Thr	Gly Asn Gln Leu Glu Thr Val His Gly Arg Val				
	590	595			600
Phe Arg Gly Leu	Ser Gly Leu Lys Thr Leu Met Leu Arg Ser Asn				
	605	610			615
Leu Ile Ser Cys	Val Ser Asn Asp Thr Phe Ala Gly Leu Ser Ser				
	620	625			630
Val Arg Leu Leu	Ser Leu Tyr Asp Asn Arg Ile Thr Thr Ile Thr				
	635	640			645
Pro Gly Ala Phe	Thr Thr Leu Val Ser Leu Ser Thr Ile Asn Leu				
	650	655			660
Leu Ser Asn Pro	Phe Asn Cys Asn Cys His Leu Ala Trp Leu Gly				
	665	670			675
Lys Trp Leu Arg	Lys Arg Arg Ile Val Ser Gly Asn Pro Arg Cys				
	680	685			690
Gln Lys Pro Phe	Phe Leu Lys Glu Ile Pro Ile Gln Asp Val Ala				
	695	700			705
Ile Gln Asp Phe	Thr Cys Asp Gly Asn Glu Glu Ser Ser Cys Gln				
	710	715			720
Leu Ser Pro Arg	Cys Pro Glu Gln Cys Thr Cys Met Glu Thr Val				
	725	730			735
Val Arg Cys Ser	Asn Lys Gly Leu Arg Ala Leu Pro Arg Gly Met				
	740	745			750

Pro Lys Asp Val Thr Glu Leu Tyr Leu Glu Gly Asn His Leu Thr	755	760	765
Ala Val Pro Arg Glu Leu Ser Ala Leu Arg His Leu Thr Leu Ile	770	775	780
Asp Leu Ser Asn Asn Ser Ile Ser Met Leu Thr Asn Tyr Thr Phe	785	790	795
Ser Asn Met Ser His Leu Ser Thr Leu Ile Leu Ser Tyr Asn Arg	800	805	810
Leu Arg Cys Ile Pro Val His Ala Phe Asn Gly Leu Arg Ser Leu	815	820	825
Arg Val Leu Thr Leu His Gly Asn Asp Ile Ser Ser Val Pro Glu	830	835	840
Gly Ser Phe Asn Asp Leu Thr Ser Leu Ser His Leu Ala Leu Gly	845	850	855
Thr Asn Pro Leu His Cys Asp Cys Ser Leu Arg Trp Leu Ser Glu	860	865	870
Trp Val Lys Ala Gly Tyr Lys Glu Pro Gly Ile Ala Arg Cys Ser	875	880	885
Ser Pro Glu Pro Met Ala Asp Arg Leu Leu Leu Thr Thr Pro Thr	890	895	900
His Arg Phe Gln Cys Lys Gly Pro Val Asp Ile Asn Ile Val Ala	905	910	915
Lys Cys Asn Ala Cys Leu Ser Ser Pro Cys Lys Asn Asn Gly Thr	920	925	930
Cys Thr Gln Asp Pro Val Glu Leu Tyr Arg Cys Ala Cys Pro Tyr	935	940	945
Ser Tyr Lys Gly Lys Asp Cys Thr Val Pro Ile Asn Thr Cys Ile	950	955	960
Gln Asn Pro Cys Gln His Gly Gly Thr Cys His Leu Ser Asp Ser	965	970	975
His Lys Asp Gly Phe Ser Cys Ser Cys Pro Leu Gly Phe Glu Gly	980	985	990
Gln Arg Cys Glu Ile Asn Pro Asp Asp Cys Glu Asp Asn Asp Cys	995	1000	1005
Glu Asn Asn Ala Thr Cys Val Asp Gly Ile Asn Asn Tyr Val Cys	1010	1015	1020
Ile Cys Pro Pro Asn Tyr Thr Gly Glu Leu Cys Asp Glu Val Ile	1025	1030	1035
Asp His Cys Val Pro Glu Leu Asn Leu Cys Gln His Glu Ala Lys			

1040	1045	1050
Cys Ile Pro Leu Asp Lys Gly Phe Ser Cys Glu Cys Val Pro Gly		
1055	1060	1065
Tyr Ser Gly Lys Leu Cys Glu Thr Asp Asn Asp Asp Cys Val Ala		
1070	1075	1080
His Lys Cys Arg His Gly Ala Gln Cys Val Asp Thr Ile Asn Gly		
1085	1090	1095
Tyr Thr Cys Thr Cys Pro Gln Gly Phe Ser Gly Pro Phe Cys Glu		
1100	1105	1110
His Pro Pro Pro Met Val Leu Leu Gln Thr Ser Pro Cys Asp Gln		
1115	1120	1125
Tyr Glu Cys Gln Asn Gly Ala Gln Cys Ile Val Val Gln Gln Glu		
1130	1135	1140
Pro Thr Cys Arg Cys Pro Pro Gly Phe Ala Gly Pro Arg Cys Glu		
1145	1150	1155
Lys Leu Ile Thr Val Asn Phe Val Gly Lys Asp Ser Tyr Val Glu		
1160	1165	1170
Leu Ala Ser Ala Lys Val Arg Pro Gln Ala Asn Ile Ser Leu Gln		
1175	1180	1185
Val Ala Thr Asp Lys Asp Asn Gly Ile Leu Leu Tyr Lys Gly Asp		
1190	1195	1200
Asn Asp Pro Leu Ala Leu Glu Leu Tyr Gln Gly His Val Arg Leu		
1205	1210	1215
Val Tyr Asp Ser Leu Ser Ser Pro Pro Thr Thr Val Tyr Ser Val		
1220	1225	1230
Glu Thr Val Asn Asp Gly Gln Phe His Ser Val Glu Leu Val Thr		
1235	1240	1245
Leu Asn Gln Thr Leu Asn Leu Val Val Asp Lys Gly Thr Pro Lys		
1250	1255	1260
Ser Leu Gly Lys Leu Gln Lys Gln Pro Ala Val Gly Ile Asn Ser		
1265	1270	1275
Pro Leu Tyr Leu Gly Gly Ile Pro Thr Ser Thr Gly Leu Ser Ala		
1280	1285	1290
Leu Arg Gln Gly Thr Asp Arg Pro Leu Gly Gly Phe His Gly Cys		
1295	1300	1305
Ile His Glu Val Arg Ile Asn Asn Glu Leu Gln Asp Phe Lys Ala		
1310	1315	1320
Leu Pro Pro Gln Ser Leu Gly Val Ser Pro Gly Cys Lys Ser Cys		
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Thr Val Cys Lys His Gly Leu Cys Arg Ser Val Glu Lys Asp Ser
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Val Val Cys Glu Cys Arg Pro Gly Trp Thr Gly Pro Leu Cys Asp
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Gln Glu Ala Arg Asp Pro Cys Leu Gly His Arg Cys His His Gly
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Lys Cys Val Ala Thr Gly Thr Ser Tyr Met Cys Lys Cys Ala Glu
1385 1390 1395

Gly Tyr Gly Gly Asp Leu Cys Asp Asn Lys Asn Asp Ser Ala Asn
1400 1405 1410

Ala Cys Ser Ala Phe Lys Cys His His Gly Gln Cys His Ile Ser
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Asp Gln Gly Glu Pro Tyr Cys Leu Cys Gln Pro Gly Phe Ser Gly
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Glu His Cys Gln Gln Glu Asn Pro Cys Leu Gly Gln Val Val Arg
1445 1450 1455

Glu Val Ile Arg Arg Gln Lys Gly Tyr Ala Ser Cys Ala Thr Ala
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Ser Lys Val Pro Ile Met Glu Cys Arg Gly Gly Cys Gly Pro Gln
1475 1480 1485

Cys Cys Gln Pro Thr Arg Ser Lys Arg Arg Lys Tyr Val Phe Gln
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Cys Thr Asp Gly Ser Ser Phe Val Glu Glu Val Glu Arg His Leu
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Glu Cys Gly Cys Leu Ala Cys Ser
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<210> 291

<211> 753

<212> DNA

<213> Homo Sapien

<400> 291

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 <211> 148
 <212> PRT
 <213> Homo Sapien

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 Phe Ser Arg Ala Gly Leu Asp Asn Tyr Trp Gly Phe Ser Leu Gly
 35 40 45
 Asn Trp Ile Cys Met Ala Tyr Tyr Glu Ser Gly Tyr Asn Thr Thr
 50 55 60
 Ala Pro Thr Val Leu Asp Asp Gly Ser Ile Asp Tyr Gly Ile Phe
 65 70 75
 Gln Ile Asn Ser Phe Ala Trp Cys Arg Arg Gly Lys Leu Lys Glu
 80 85 90
 Asn Asn His Cys His Val Ala Cys Ser Ala Leu Ile Thr Asp Asp
 95 100 105
 Leu Thr Asp Ala Ile Ile Cys Ala Arg Lys Ile Val Lys Glu Thr
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 Arg Asp Leu Ser Glu Trp Lys Lys Gly Cys Glu Val Ser
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<210> 293
 <211> 1176
 <212> DNA
 <213> Homo Sapien

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Index

<210> 295
 <211> 1648
 <212> DNA
 <213> Homo Sapien

<400> 295
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<211> 323

<212> PRT

<213> Homo Sapien

<400> 296

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Phe	Arg	Leu	Ala	Arg	Arg	Arg	Lys	Lys	Ile	Leu	Phe	Tyr	Cys	His	35	40	45	
Phe	Pro	Asp	Leu	Leu	Leu	Thr	Lys	Arg	Asp	Ser	Phe	Leu	Lys	Arg	50	55	60	
Leu	Tyr	Arg	Ala	Pro	Ile	Asp	Trp	Ile	Glu	Glu	Tyr	Thr	Thr	Gly	65	70	75	
Met	Ala	Asp	Cys	Ile	Leu	Val	Asn	Ser	Gln	Phe	Thr	Ala	Ala	Val	80	85	90	
Phe	Lys	Glu	Thr	Phe	Lys	Ser	Leu	Ser	His	Ile	Asp	Pro	Asp	Val	95	100	105	
Leu	Tyr	Pro	Ser	Leu	Asn	Val	Thr	Ser	Phe	Asp	Ser	Val	Val	Pro	110	115	120	
Glu	Lys	Leu	Asp	Asp	Leu	Val	Pro	Lys	Gly	Lys	Lys	Phe	Leu	Leu	125	130	135	
Leu	Ser	Ile	Asn	Arg	Tyr	Glu	Arg	Lys	Lys	Asn	Leu	Thr	Leu	Ala	140	145	150	
Leu	Glu	Ala	Leu	Val	Gln	Leu	Arg	Gly	Arg	Leu	Thr	Ser	Gln	Asp	155	160	165	
Trp	Glu	Arg	Val	His	Leu	Ile	Val	Ala	Gly	Gly	Tyr	Asp	Glu	Arg	170	175	180	

Val	Leu	Glu	Asn	Val	Glu	His	Tyr	Gln	Glu	Leu	Lys	Lys	Met	Val
				185					190					195
Gln	Gln	Ser	Asp	Leu	Gly	Gln	Tyr	Val	Thr	Phe	Leu	Arg	Ser	Phe
				200					205					210
Ser	Asp	Lys	Gln	Lys	Ile	Ser	Leu	Leu	His	Ser	Cys	Thr	Cys	Val
				215					220					225
Leu	Tyr	Thr	Pro	Ser	Asn	Glu	His	Phe	Gly	Ile	Val	Pro	Leu	Glu
				230					235					240
Ala	Met	Tyr	Met	Gln	Cys	Pro	Val	Ile	Ala	Val	Asn	Ser	Gly	Gly
				245					250					255
Pro	Leu	Glu	Ser	Ile	Asp	His	Ser	Val	Thr	Gly	Phe	Leu	Cys	Glu
				260					265					270
Pro	Asp	Pro	Val	His	Phe	Ser	Glu	Ala	Ile	Glu	Lys	Phe	Ile	Arg
				275					280					285
Glu	Pro	Ser	Leu	Lys	Ala	Thr	Met	Gly	Leu	Ala	Gly	Arg	Ala	Arg
				290					295					300
Val	Lys	Glu	Lys	Phe	Ser	Pro	Glu	Ala	Phe	Thr	Glu	Gln	Leu	Tyr
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Arg	Tyr	Val	Thr	Lys	Leu	Leu	Val							
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 <212> DNA
 <213> Homo Sapien

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 gctgaagtca ttattaaggt atcaatctgg tgggtggcagt gtgagtgaag 400
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ggaaaaaaca atatgaagat gccctcatgc aactggagtc tgttttaagg 750
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<210> 298

<211> 462

<212> PRT

<213> Homo Sapien

<400> 298

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Val	Gly	Ala	Val	Leu	Tyr	Leu	Tyr	Pro	Ala	Ser	Arg	Gln	Ala	Ala
			20						25					30

Gly	Ile	Pro	Gly	Ile	Thr	Pro	Thr	Glu	Glu	Lys	Asp	Gly	Asn	Leu
			35						40					45

Pro Asp Ile Val Asn Ser Gly Ser Leu His Glu Phe Leu Val Asn

Leu Gln Asp Ile Glu Gly Lys Ile Asp Arg Phe Ile Ile Pro Arg
350 355 360

Glu Thr Leu Val Leu Tyr Ala Leu Gly Val Val Leu Gln Asp Pro
365 370 375

Asn Thr Trp Pro Ser Pro His Lys Phe Asp Pro Asp Arg Phe Asp
380 385 390

Asp Glu Leu Val Met Lys Thr Phe Ser Ser Leu Gly Phe Ser Gly
395 400 405

Thr Gln Glu Cys Pro Glu Leu Arg Phe Ala Tyr Met Val Thr Thr
410 415 420

Val Leu Leu Ser Val Leu Val Lys Arg Leu His Leu Leu Ser Val
425 430 435

Glu Gly Gln Val Ile Glu Thr Lys Tyr Glu Leu Val Thr Ser Ser
440 445 450

Arg Glu Glu Ala Trp Ile Thr Val Ser Lys Arg Tyr
455 460

<210> 299
<211> 759
<212> DNA
<213> Homo Sapien

<400> 299
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cgtcacacc ttattctggt cccgggacag caacatacag gcctgcctgc 200

ctctcacgtt ccccccgag gagtatgaca agcaggacat tcagctggtg 250

gcgcgcctct ctgtcacctt gggcctcttt gcagtggagc tggccggttt 300

cctctcagga gtctccatgt tcaacagcac ccagagcctc atctccattg 350

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aaaaaaaaa 759

<210> 300

<211> 140

<212> PRT

<213> Homo Sapien

<400> 300

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Leu Ala His Leu Val Val Val Ile Thr Leu Phe Trp Ser Arg Asp
20 25 30

Ser Asn Ile Gln Ala Cys Leu Pro Leu Thr Phe Thr Pro Glu Glu
35 40 45

Tyr Asp Lys Gln Asp Ile Gln Leu Val Ala Ala Leu Ser Val Thr
50 55 60

Leu Gly Leu Phe Ala Val Glu Leu Ala Gly Phe Leu Ser Gly Val
65 70 75

Ser Met Phe Asn Ser Thr Gln Ser Leu Ile Ser Ile Gly Ala His
80 85 90

Cys Ser Ala Ser Val Ala Leu Ser Phe Phe Ile Phe Glu Arg Trp
95 100 105

Glu Cys Thr Thr Tyr Trp Tyr Ile Phe Val Phe Cys Ser Ala Leu
110 115 120

Pro Ala Val Thr Glu Met Ala Leu Phe Val Thr Val Phe Gly Leu
125 130 135

Lys Lys Lys Pro Phe
140

<210> 301

<211> 1871

<212> DNA

<213> Homo Sapien

<400> 301

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gcggggccac atctcaccta agtcccgcct catggccaat tccactctcc 250

tagggctgct ggccccgcct ggggaggctt ggggcattct tgggcagccc 300

cccaaccgcc cgaaccacag cccccaccc tcagccaagg tgaagaaaat 350
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 tgctcgtcac aggggaagatt gtggaccatg gcaatgggac cttcagcgtc 450
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 aagccaaggc ctccaaaatc ttcaactgcc ggatggagtg ggagaaggta 600
 gaacggggcc gccggacctc gctttgcacc cacgaccag ccaagatctg 650
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 aacctgaagc tgtggagtga ctagatcaca ggagcactgg aggaggagtg 1050
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 ctgggtcccc gaggcctgtg ggcaggccga tcagtgtggc cccagatcaa 1150
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 gcaacaggga gggggagatt tcatcagtgt ggacagcctg tcaacttagg 1250
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 gtgtgctgag catggcatga ggctgaagtg gcaaccctgg ggtctttgat 1400
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<210> 302
 <211> 252
 <212> PRT
 <213> Homo Sapien

<400> 302
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 Leu Tyr Leu Val Ile Cys Gly Gln Asp Asp Gly Pro Pro Gly Ser
 20 25 30
 Glu Asp Pro Glu Arg Asp Asp His Glu Gly Gln Pro Arg Pro Arg
 35 40 45
 Val Pro Arg Lys Arg Gly His Ile Ser Pro Lys Ser Arg Pro Met
 50 55 60
 Ala Asn Ser Thr Leu Leu Gly Leu Leu Ala Pro Pro Gly Glu Ala
 65 70 75
 Trp Gly Ile Leu Gly Gln Pro Pro Asn Arg Pro Asn His Ser Pro
 80 85 90
 Pro Pro Ser Ala Lys Val Lys Lys Ile Phe Gly Trp Gly Asp Phe
 95 100 105
 Tyr Ser Asn Ile Lys Thr Val Ala Leu Asn Leu Leu Val Thr Gly
 110 115 120
 Lys Ile Val Asp His Gly Asn Gly Thr Phe Ser Val His Phe Gln
 125 130 135
 His Asn Ala Thr Gly Gln Gly Asn Ile Ser Ile Ser Leu Val Pro
 140 145 150
 Pro Ser Lys Ala Val Glu Phe His Gln Glu Gln Gln Ile Phe Ile
 155 160 165
 Glu Ala Lys Ala Ser Lys Ile Phe Asn Cys Arg Met Glu Trp Glu
 170 175 180
 Lys Val Glu Arg Gly Arg Arg Thr Ser Leu Cys Thr His Asp Pro
 185 190 195
 Ala Lys Ile Cys Ser Arg Asp His Ala Gln Ser Ser Ala Thr Trp
 200 205 210
 Ser Cys Ser Gln Pro Phe Lys Val Val Cys Val Tyr Ile Ala Phe
 215 220 225
 Tyr Ser Thr Asp Tyr Arg Leu Val Gln Lys Val Cys Pro Asp Tyr

240

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<210> 303
<211> 902
<212> DNA
<213> Homo Sapien
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<210> 304
<211> 257
<212> PRT
<213> Homo Sapien
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472

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Arg Ile Ile Phe Leu Ile Ala Gly Ala Phe Phe Trp Leu Val Ser
35 40 45

Leu Leu Ile Ser Ser Leu Val Trp Phe Met Ala Arg Val Ile Ile
50 55 60

Asp Asn Lys Asp Gly Pro Thr Gln Lys Tyr Leu Leu Ile Phe Gly
65 70 75

Ala Phe Val Ser Val Tyr Ile Gln Glu Met Phe Arg Phe Ala Tyr
80 85 90

Tyr Lys Leu Leu Lys Lys Ala Ser Glu Gly Leu Lys Ser Ile Asn
95 100 105

Pro Gly Glu Thr Ala Pro Ser Met Arg Leu Leu Ala Tyr Val Ser
110 115 120

Gly Leu Gly Phe Gly Ile Met Ser Gly Val Phe Ser Phe Val Asn
125 130 135

Thr Leu Ser Asp Ser Leu Gly Pro Gly Thr Val Gly Ile His Gly
140 145 150

Asp Ser Pro Gln Phe Phe Leu Tyr Ser Ala Phe Met Thr Leu Val
155 160 165

Ile Ile Leu Leu His Val Phe Trp Gly Ile Val Phe Phe Asp Gly
170 175 180

Cys Glu Lys Lys Lys Trp Gly Ile Leu Leu Ile Val Leu Leu Thr
185 190 195

His Leu Leu Val Ser Ala Gln Thr Phe Ile Ser Ser Tyr Tyr Gly
200 205 210

Ile Asn Leu Ala Ser Ala Phe Ile Ile Leu Val Leu Met Gly Thr
215 220 225

Trp Ala Phe Leu Ala Ala Gly Gly Ser Cys Arg Ser Leu Lys Leu
230 235 240

Cys Leu Leu Cys Gln Asp Lys Asn Phe Leu Leu Tyr Asn Gln Arg
245 250 255

Ser Arg

<210> 305

<211> 1073

<212> DNA

<213> Homo Sapien

<400> 305

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aacctgcttt gggactccct cccacaaaac tggctccgga tcagggaaca 200
ctaccaaacc aacagcagtc aaatcaggtc tttccttctt taagtctgat 250
accattaaca cagatgctca cactggggcc agatctgcat ctgttaaadc 300
ctgctgcagg aatgacacct ggtaccaga cccaccatt gacctggga 350
gggttgaatg tacaacagca actgcacca catgtgttac caattttgt 400
cacacaactt ggagcccagg gcactatcct aagctcagag gaattgccac 450
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tatgctgcct ggatgatatg catattaaaa catatttgga aaactggaaa 1000
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1050
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<210> 306

<211> 209

<212> PRT

<213> Homo Sapien

<400> 306

Met Arg Ser Thr Ile Leu Leu Phe Cys Leu Leu Gly Ser Thr Arg
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Ser Leu Pro Gln Leu Lys Pro Ala Leu Gly Leu Pro Pro Thr Lys
20 25 30

Leu Ala Pro Asp Gln Gly Thr Leu Pro Asn Gln Gln Gln Ser Asn
35 40 45

Gln Val Phe Pro Ser Leu Ser Leu Ile Pro Leu Thr Gln Met Leu

					50						55						60
Thr	Leu	Gly	Pro	Asp	Leu	His	Leu	Leu	Asn	Pro	Ala	Ala	Gly	Met			
					65						70						75
Thr	Pro	Gly	Thr	Gln	Thr	His	Pro	Leu	Thr	Leu	Gly	Gly	Leu	Asn			
					80						85						90
Val	Gln	Gln	Gln	Leu	His	Pro	His	Val	Leu	Pro	Ile	Phe	Val	Thr			
					95						100						105
Gln	Leu	Gly	Ala	Gln	Gly	Thr	Ile	Leu	Ser	Ser	Glu	Glu	Leu	Pro			
					110						115						120
Gln	Ile	Phe	Thr	Ser	Leu	Ile	Ile	His	Ser	Leu	Phe	Pro	Gly	Gly			
					125						130						135
Ile	Leu	Pro	Thr	Ser	Gln	Ala	Gly	Ala	Asn	Pro	Asp	Val	Gln	Asp			
					140						145						150
Gly	Ser	Leu	Pro	Ala	Gly	Gly	Ala	Gly	Val	Asn	Pro	Ala	Thr	Gln			
					155						160						165
Gly	Thr	Pro	Ala	Gly	Arg	Leu	Pro	Thr	Pro	Ser	Gly	Thr	Asp	Asp			
					170						175						180
Asp	Phe	Ala	Val	Thr	Thr	Pro	Ala	Gly	Ile	Gln	Arg	Ser	Thr	His			
					185						190						195
Ala	Ile	Glu	Glu	Ala	Thr	Thr	Glu	Ser	Ala	Asn	Gly	Ile	Gln				
					200						205						

<210> 307

<211> 2786

<212> DNA

<213> Homo Sapien

<400> 307
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acttgaagct caatttctgg aaatctccct cctccttcaa tcggcctgtg 200

gatgtcctgg tcccatctgt cagtctgcag gcatttaa at ccttcctgag 250

atcccagggc ttagagtacg cagtgacaat tgaggacctg caggcccttt 300

tagacaatga agatgatgaa atgcaacaca atgaagggca agaacggagc 350

agtaataact tcaactacgg ggcttaccat tccctggaag ctatttacca 400

cgagatggac aacattgccg cagactttcc tgacctggcg aggaggggtga 450

actgggaaag gcgtgaggcg gccggccggt tggctgaatg caggcatcca 550
 ttcccgagag tggatctccc aggccactgc aatctggacg gcaaggaaga 600
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 atggatattt tcttggtgcc tgtggccaat cctgatggat atgtgtatac 700
 tcaaactcaa aaccgattat ggaggaagac gcggtcccg aatcctggaa 750
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 ggaaagggag ccagcgacaa cccttgctcc gaagtgtacc atggaccca 850
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Ile	Glu	Asp	Leu	Gln	Ala	Leu	Leu	Asp	Asn	Glu	Asp	Asp	Glu	Met	95	100	105
Gln	His	Asn	Glu	Gly	Gln	Glu	Arg	Ser	Ser	Asn	Asn	Phe	Asn	Tyr	110	115	120
Gly	Ala	Tyr	His	Ser	Leu	Glu	Ala	Ile	Tyr	His	Glu	Met	Asp	Asn	125	130	135
Ile	Ala	Ala	Asp	Phe	Pro	Asp	Leu	Ala	Arg	Arg	Val	Lys	Ile	Gly	140	145	150
His	Ser	Phe	Glu	Asn	Arg	Pro	Met	Tyr	Val	Leu	Lys	Phe	Ser	Thr	155	160	165
Gly	Lys	Gly	Val	Arg	Arg	Pro	Ala	Val	Trp	Leu	Asn	Ala	Gly	Ile	170	175	180
His	Ser	Arg	Glu	Trp	Ile	Ser	Gln	Ala	Thr	Ala	Ile	Trp	Thr	Ala	185	190	195
Arg	Lys	Ile	Val	Ser	Asp	Tyr	Gln	Arg	Asp	Pro	Ala	Ile	Thr	Ser	200	205	210
Ile	Leu	Glu	Lys	Met	Asp	Ile	Phe	Leu	Leu	Pro	Val	Ala	Asn	Pro	215	220	225
Asp	Gly	Tyr	Val	Tyr	Thr	Gln	Thr	Gln	Asn	Arg	Leu	Trp	Arg	Lys	230	235	240
Thr	Arg	Ser	Arg	Asn	Pro	Gly	Ser	Ser	Cys	Ile	Gly	Ala	Asp	Pro	245	250	255
Asn	Arg	Asn	Trp	Asn	Ala	Ser	Phe	Ala	Gly	Lys	Gly	Ala	Ser	Asp	260	265	270
Asn	Pro	Cys	Ser	Glu	Val	Tyr	His	Gly	Pro	His	Ala	Asn	Ser	Glu	275	280	285
Val	Glu	Val	Lys	Ser	Val	Val	Asp	Phe	Ile	Gln	Lys	His	Gly	Asn	290	295	300
Phe	Lys	Gly	Phe	Ile	Asp	Leu	His	Ser	Tyr	Ser	Gln	Leu	Leu	Met	305	310	315
Tyr	Pro	Tyr	Gly	Tyr	Ser	Val	Lys	Lys	Ala	Pro	Asp	Ala	Glu	Glu	320	325	330
Leu	Asp	Lys	Val	Ala	Arg	Leu	Ala	Ala	Lys	Ala	Leu	Ala	Ser	Val	335	340	345
Ser	Gly	Thr	Glu	Tyr	Gln	Val	Gly	Pro	Thr	Cys	Thr	Thr	Val	Tyr	350	355	360
Pro	Ala	Ser	Gly	Ser	Ser	Ile	Asp	Trp	Ala	Tyr	Asp	Asn	Gly	Ile	365	370	375
Lys	Phe	Ala	Phe	Thr	Phe	Glu	Leu	Arg	Asp	Thr	Gly	Thr	Tyr	Gly			

	380		385		390									
Phe	Leu	Leu	Pro	Ala	Asn	Gln	Ile	Ile	Pro	Thr	Ala	Glu	Glu	Thr
			395						400					405
Trp	Leu	Gly	Leu	Lys	Thr	Ile	Met	Glu	His	Val	Arg	Asp	Asn	Leu
			410						415					420

Tyr

<210> 309
 <211> 2436
 <212> DNA
 <213> Homo Sapien

<400> 309
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 ctttctcaag aatcctctgt tctttgccct cttaaagtctt ggtacatcta 200
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<211> 596

<212> PRT
<213> Homo Sapien

<400> 310

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Thr	Asn	Ser	Glu	Ser 305	Ser	Thr	Thr	Ser	Ser 310	Gly	Ala	Ser	Thr	Ala 315
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Thr	Asn	Ser	Glu	Ser 335	Ser	Thr	Val	Ser	Ser 340	Gly	Ile	Ser	Thr	Val 345
Thr	Asn	Ser	Glu	Ser 350	Ser	Thr	Pro	Ser	Ser 355	Gly	Ala	Asn	Thr	Ala 360
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Ala	Leu	Thr	Gly	Met 485	His	Thr	Thr	Ser	His 490	Ser	Ala	Ser	Thr	Ala 495
Val	Ser	Glu	Ala	Lys 500	Pro	Gly	Gly	Ser	Leu 505	Val	Pro	Trp	Glu	Ile 510
Phe	Leu	Ile	Thr	Leu 515	Val	Ser	Val	Val	Ala 520	Ala	Val	Gly	Leu	Phe 525
Ala	Gly	Leu	Phe	Phe 530	Cys	Val	Arg	Asn	Ser 535	Leu	Ser	Leu	Arg	Asn 540
Thr	Phe	Asn	Thr	Ala 545	Val	Tyr	His	Pro	His 550	Gly	Leu	Asn	His	Gly 555
Leu	Gly	Pro	Gly	Pro	Gly	Gly	Asn	His	Gly	Ala	Pro	His	Arg	Pro

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 <223> unknown base

<400> 311
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Ser Ser Glu Gly	Ser Asp Thr Ser Val	Pro Ile Pro Val Val Pro	125	130	135
Leu Arg Gly Val	Asp Asp Ser Tyr Pro	Pro Gln Lys Lys Ser Phe	140	145	150
Met Met Leu Lys	Tyr Met His Asp His	Tyr Leu Asp Lys Tyr Glu	155	160	165
Trp Phe Met Arg	Ala Asp Asp Asp Val	Tyr Ile Lys Gly Asp Arg	170	175	180
Leu Glu Asn Phe	Leu Arg Ser Leu Asn	Ser Ser Glu Pro Leu Phe	185	190	195
Leu Gly Gln Thr	Gly Leu Gly Thr Thr	Glu Glu Met Gly Lys Leu	200	205	210
Ala Leu Glu Pro	Gly Glu Asn Phe Cys	Met Gly Gly Pro Gly Val	215	220	225
Ile Met Ser Arg	Glu Val Leu Arg Arg	Met Val Pro His Ile Gly	230	235	240
Lys Cys Leu Arg	Glu Met Tyr Thr Thr	His Glu Asp Val Glu Val	245	250	255
Gly Arg Cys Val	Arg Arg Phe Ala Gly	Val Gln Cys Val Trp Ser	260	265	270
Tyr Glu Met Arg	Gln Leu Phe Tyr Glu	Asn Tyr Glu Gln Asn Lys	275	280	285
Lys Gly Tyr Ile	Arg Asp Leu His Asn	Ser Lys Ile His Gln Ala	290	295	300
Ile Thr Leu His	Pro Asn Lys Asn Pro	Pro Tyr Gln Tyr Arg Leu	305	310	315
His Ser Tyr Met	Leu Ser Arg Lys Ile	Ser Glu Leu Arg His Arg	320	325	330
Thr Ile Gln Leu	His Arg Glu Ile Val	Leu Met Ser Lys Tyr Ser	335	340	345
Asn Thr Glu Ile	His Lys Glu Asp Leu	Gln Leu Gly Ile Pro Pro	350	355	360
Ser Phe Met Arg	Phe Gln Pro Arg Gln	Arg Glu Glu Ile Leu Glu	365	370	375
Trp Glu Phe Leu	Thr Gly Lys Tyr Leu	Tyr Ser Ala Val Asp Gly	380	385	390
Gln Pro Pro Arg	Arg Gly Met Asp Ser	Ala Gln Arg Glu Ala Leu	395	400	405
Asp Asp Ile Val	Met Gln Val Met Glu	Met Ile Asn Ala Asn Ala			

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Tyr	Arg	Arg	Val	Asn 440	Pro	Met	Tyr	Gly	Ala 445	Glu	Tyr	Ile	Leu	Asp 450
Leu	Leu	Leu	Leu	Tyr 455	Lys	Lys	His	Lys	Gly 460	Lys	Lys	Met	Thr	Val 465
Pro	Val	Arg	Arg	His 470	Ala	Tyr	Leu	Gln	Gln 475	Thr	Phe	Ser	Lys	Ile 480
Gln	Phe	Val	Glu	His 485	Glu	Glu	Leu	Asp	Ala 490	Gln	Glu	Leu	Ala	Lys 495
Arg	Ile	Asn	Gln	Glu 500	Ser	Gly	Ser	Leu	Ser 505	Phe	Leu	Ser	Asn	Ser 510
Leu	Lys	Lys	Leu	Val 515	Pro	Phe	Gln	Leu	Pro 520	Gly	Ser	Lys	Ser	Glu 525
His	Lys	Glu	Pro	Lys 530	Asp	Lys	Lys	Ile	Asn 535	Ile	Leu	Ile	Pro	Leu 540
Ser	Gly	Arg	Phe	Asp 545	Met	Phe	Val	Arg	Phe 550	Met	Gly	Asn	Phe	Glu 555
Lys	Thr	Cys	Leu	Ile 560	Pro	Asn	Gln	Asn	Val 565	Lys	Leu	Val	Val	Leu 570
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Leu	Met	Arg	Asp	Tyr 590	Arg	Ile	Lys	Tyr	Pro 595	Lys	Ala	Asp	Met	Gln 600
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Val	Gly	Ser	Ser	Gln 620	Phe	Asn	Asn	Glu	Ser 625	Leu	Leu	Phe	Phe	Cys 630
Asp	Val	Asp	Leu	Val 635	Phe	Thr	Thr	Glu	Phe 640	Leu	Gln	Arg	Cys	Arg 645
Ala	Asn	Thr	Val	Leu 650	Gly	Gln	Gln	Ile	Tyr 655	Phe	Pro	Ile	Ile	Phe 660
Ser	Gln	Tyr	Asp	Pro 665	Lys	Ile	Val	Tyr	Ser 670	Gly	Lys	Val	Pro	Ser 675
Asp	Asn	His	Phe	Ala 680	Phe	Thr	Gln	Lys	Thr 685	Gly	Phe	Trp	Arg	Asn 690
Tyr	Gly	Phe	Gly	Ile 695	Thr	Cys	Ile	Tyr	Lys 700	Gly	Asp	Leu	Val	Arg 705

Val Gly Gly Phe Asp Val Ser Ile Gln Gly Trp Gly Leu Glu Asp	710	715	720
Val Asp Leu Phe Asn Lys Val Val Gln Ala Gly Leu Lys Thr Phe	725	730	735
Arg Ser Gln Glu Val Gly Val Val His Val His His Pro Val Phe	740	745	750
Cys Asp Pro Asn Leu Asp Pro Lys Gln Tyr Lys Met Cys Leu Gly	755	760	765
Ser Lys Ala Ser Thr Tyr Gly Ser Thr Gln Gln Leu Ala Glu Met	770	775	780
Trp Leu Glu Lys Asn Asp Pro Ser Tyr Ser Lys Ser Ser Asn Asn	785	790	795
Asn Gly Ser Val Arg Thr Ala	800		

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Trp	Tyr	Arg	Trp	Ile	Asn	Asn	Arg	Leu	Val	Ala	Thr	Trp	Leu	Thr	80	85	90
Leu	Pro	Val	Ala	Leu	Leu	Glu	Thr	Met	Phe	Gly	Val	Lys	Val	Ile	95	100	105
Ile	Thr	Gly	Asp	Ala	Phe	Val	Pro	Gly	Glu	Arg	Ser	Val	Ile	Ile	110	115	120
Met	Asn	His	Arg	Thr	Arg	Met	Asp	Trp	Met	Phe	Leu	Trp	Asn	Cys	125	130	135
Leu	Met	Arg	Tyr	Ser	Tyr	Leu	Arg	Leu	Glu	Lys	Ile	Cys	Leu	Lys	140	145	150
Ala	Ser	Leu	Lys	Gly	Val	Pro	Gly	Phe	Gly	Trp	Ala	Met	Gln	Ala	155	160	165
Ala	Ala	Tyr	Ile	Phe	Ile	His	Arg	Lys	Trp	Lys	Asp	Asp	Lys	Ser	170	175	180
His	Phe	Glu	Asp	Met	Ile	Asp	Tyr	Phe	Cys	Asp	Ile	His	Glu	Pro	185	190	195
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Ser	Lys	Ser	Arg	Ser	Asn	Ala	Phe	Ala	Glu	Lys	Asn	Gly	Leu	Gln	215	220	225
Lys	Tyr	Glu	Tyr	Val	Leu	His	Pro	Arg	Thr	Thr	Gly	Phe	Thr	Phe	230	235	240
Val	Val	Asp	Arg	Leu	Arg	Glu	Gly	Lys	Asn	Leu	Asp	Ala	Val	His	245	250	255
Asp	Ile	Thr	Val	Ala	Tyr	Pro	His	Asn	Ile	Pro	Gln	Ser	Glu	Lys	260	265	270
His	Leu	Leu	Gln	Gly	Asp	Phe	Pro	Arg	Glu	Ile	His	Phe	His	Val	275	280	285
His	Arg	Tyr	Pro	Ile	Asp	Thr	Leu	Pro	Thr	Ser	Lys	Glu	Asp	Leu	290	295	300
Gln	Leu	Trp	Cys	His	Lys	Arg	Trp	Glu	Glu	Lys	Glu	Glu	Arg	Leu	305	310	315
Arg	Ser	Phe	Tyr	Gln	Gly	Glu	Lys	Asn	Phe	Tyr	Phe	Thr	Gly	Gln	320	325	330
Ser	Val	Ile	Pro	Pro	Cys	Lys	Ser	Glu	Leu	Arg	Val	Leu	Val	Val	335	340	345
Lys	Leu	Leu	Ser	Ile	Leu	Tyr	Trp	Thr	Leu	Phe	Ser	Pro	Ala	Met	350	355	360
Cys	Leu	Leu	Ile	Tyr	Leu	Tyr	Ser	Leu	Val	Lys	Trp	Tyr	Phe	Ile			

	365		370		375
Ile Thr Ile Val	Ile Phe Val Leu Gln	Glu Arg Ile Phe Gly Gly			
	380	385		390	
Leu Glu Ile Ile	Glu Leu Ala Cys Tyr	Arg Leu Leu His Lys Gln			
	395	400		405	
Pro His Leu Asn	Ser Lys Lys Asn Glu				
	410				

<210> 315
 <211> 2403
 <212> DNA
 <213> Homo Sapien

<400> 315
 cggctcgagc ggctcgagtg aagagcctct ccacggctcc tgcgcctgag 50
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 ttcatagtgt gagatcaacc cacaggaata tccatggctt ttgtgctcat 150
 tttggttctc agtttctacg agctgggtgc aggacagtgg caagtcaactg 200
 gaccgggcaa gtttgtccag gccttgggtg gggaggacgc cgtgttctcc 250
 tgctccctct ttcttgagac cagtgcagag gctatggaag tgcggttctt 300
 caggaatcag ttccatgctg tgggtccact ctacagagat ggggaagact 350
 ggggaatctaa gcagatgcca cagtatcgag ggagaactga gtttgtgaag 400
 gactccattg cagggggggcg tgtctctcta aggctaaaaa acatcactcc 450
 ctccggacatc ggctgtatg ggtgctggtt cagttcccag atttacgatg 500
 aggaggccac ctgggagctg cgggtggcag cactgggctc acttcctctc 550
 atttccatcg tgggatatgt tgacggaggt atccagttac tctgcctgtc 600
 ctccaggctg ttccccagc ccacagccaa gtggaaaggt ccacaaggac 650
 aggatttgtc ttccagactcc agagcaaagc cagatgggta cagcctgtat 700
 gatgtggaga tctccattat agtccaggaa aatgctggga gcatattgtg 750
 ttccatccac cttgctgagc agagtcatga ggtggaatcc aaggtattga 800
 taggagagac gtttttccag ccctcacctt ggcgctggc ttctatttta 850
 ctccgggttac tctgtggtgc cctgtgtggt gttgtcatgg ggatgataat 900
 tgttttcttc aaatccaaag ggaaaatcca ggcggaactg gactggagaa 950
 gaaagcacgg acaggcagaa ttgagagacg cccggaaca cgcagtggag 1000
 gtgactctgg atccagagac ggctcaccgc aagctctgcg tttctgatct 1050

gaaaactgta	acccatagaa	aagctcccca	ggaggtgcct	cactctgaga	1100
agagatttac	aaggaagagt	gtggtggctt	ctcagggttt	ccaagcaggg	1150
agacattact	gggaggtgga	cgtgggacaa	aatgtagggt	ggtatgtggg	1200
agtgtgtcgg	gatgacgtag	acagggggaa	gaacaatgtg	actttgtctc	1250
ccaacaatgg	gtattgggtc	ctcagactga	caacagaaca	tttgtatttc	1300
acattcaatc	cccattttat	cagcctcccc	cccagcacc	ctcctacacg	1350
agtaggggtc	ttcctggact	atgaggggtg	gaccatctcc	ttcttcaata	1400
caaatgacca	gtcccttatt	tataccctgc	tgacatgtca	gtttgaaggc	1450
ttgttgagac	cctatatcca	gcatgcgatg	tatgacgagg	aaaaggggac	1500
tcccatattc	atatgtccag	tgtcctgggg	atgagacaga	gaagaccctg	1550
cttaaagggc	cccacaccac	agaccagac	acagccaagg	gagagtgtct	1600
ccgacaggtg	gccccagctt	cctctccgga	gcctgcgcac	agagagtcac	1650
gccccccact	ctcctttagg	gagctgaggt	tcttctgccc	tgagccctgc	1700
agcagcggca	gtcacagctt	ccagatgagg	ggggattggc	ctgaccctgt	1750
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ttaggtttag	tttgtgaaaa	ctccatccag	ctaagcgatc	ttgaacaagt	1850
cacaacctcc	caggctcctc	atttgctagt	cacggacagt	gattcctgcc	1900
tcacaggtga	agattaaaga	gacaacgaat	gtgaatcatg	cttgcaggtt	1950
tgagggcaca	gtgtttgcta	atgatgtgtt	tttatattat	acattttccc	2000
accataaaact	ctgttttgctt	attccacatt	aatttacttt	tctctataacc	2050
aaatcaccca	tggaatagtt	attgaacacc	tgctttgtga	ggctcaaaga	2100
ataaagagga	ggtaggattt	ttcactgatt	ctataagccc	agcattacct	2150
gataccaaaa	ccaggcaaag	aaaacagaag	aagaggaagg	aaaactacag	2200
gtccatatcc	ctcattaaca	cagacacaaa	aattctaaat	aaaattttta	2250
caaattaaac	taaacaatat	atttaaagat	gatataatac	tactcagtgt	2300
ggtttgtccc	acaaatgcag	agttggttta	atatttaa	atcaaccagt	2350
gtaattcagc	acattaataa	agtaaaaaag	aaaaccataa	aaaaaaaaaa	2400
aaa	2403				

<210> 316
<211> 466

<212> PRT
 <213> Homo Sapien

<400> 316

Met	Ala	Phe	Val	Leu	Ile	Leu	Val	Leu	Ser	Phe	Tyr	Glu	Leu	Val	1	5	10	15
Ser	Gly	Gln	Trp	Gln	Val	Thr	Gly	Pro	Gly	Lys	Phe	Val	Gln	Ala	20	25	30	
Leu	Val	Gly	Glu	Asp	Ala	Val	Phe	Ser	Cys	Ser	Leu	Phe	Pro	Glu	35	40	45	
Thr	Ser	Ala	Glu	Ala	Met	Glu	Val	Arg	Phe	Phe	Arg	Asn	Gln	Phe	50	55	60	
His	Ala	Val	Val	His	Leu	Tyr	Arg	Asp	Gly	Glu	Asp	Trp	Glu	Ser	65	70	75	
Lys	Gln	Met	Pro	Gln	Tyr	Arg	Gly	Arg	Thr	Glu	Phe	Val	Lys	Asp	80	85	90	
Ser	Ile	Ala	Gly	Gly	Arg	Val	Ser	Leu	Arg	Leu	Lys	Asn	Ile	Thr	95	100	105	
Pro	Ser	Asp	Ile	Gly	Leu	Tyr	Gly	Cys	Trp	Phe	Ser	Ser	Gln	Ile	110	115	120	
Tyr	Asp	Glu	Glu	Ala	Thr	Trp	Glu	Leu	Arg	Val	Ala	Ala	Leu	Gly	125	130	135	
Ser	Leu	Pro	Leu	Ile	Ser	Ile	Val	Gly	Tyr	Val	Asp	Gly	Gly	Ile	140	145	150	
Gln	Leu	Leu	Cys	Leu	Ser	Ser	Gly	Trp	Phe	Pro	Gln	Pro	Thr	Ala	155	160	165	
Lys	Trp	Lys	Gly	Pro	Gln	Gly	Gln	Asp	Leu	Ser	Ser	Asp	Ser	Arg	170	175	180	
Ala	Asn	Ala	Asp	Gly	Tyr	Ser	Leu	Tyr	Asp	Val	Glu	Ile	Ser	Ile	185	190	195	
Ile	Val	Gln	Glu	Asn	Ala	Gly	Ser	Ile	Leu	Cys	Ser	Ile	His	Leu	200	205	210	
Ala	Glu	Gln	Ser	His	Glu	Val	Glu	Ser	Lys	Val	Leu	Ile	Gly	Glu	215	220	225	
Thr	Phe	Phe	Gln	Pro	Ser	Pro	Trp	Arg	Leu	Ala	Ser	Ile	Leu	Leu	230	235	240	
Gly	Leu	Leu	Cys	Gly	Ala	Leu	Cys	Gly	Val	Val	Met	Gly	Met	Ile	245	250	255	
Ile	Val	Phe	Phe	Lys	Ser	Lys	Gly	Lys	Ile	Gln	Ala	Glu	Leu	Asp	260	265	270	

Trp	Arg	Arg	Lys	His	Gly	Gln	Ala	Glu	Leu	Arg	Asp	Ala	Arg	Lys	
				275					280					285	
His	Ala	Val	Glu	Val	Thr	Leu	Asp	Pro	Glu	Thr	Ala	His	Pro	Lys	
				290					295					300	
Leu	Cys	Val	Ser	Asp	Leu	Lys	Thr	Val	Thr	His	Arg	Lys	Ala	Pro	
				305					310					315	
Gln	Glu	Val	Pro	His	Ser	Glu	Lys	Arg	Phe	Thr	Arg	Lys	Ser	Val	
				320					325					330	
Val	Ala	Ser	Gln	Gly	Phe	Gln	Ala	Gly	Arg	His	Tyr	Trp	Glu	Val	
				335					340					345	
Asp	Val	Gly	Gln	Asn	Val	Gly	Trp	Tyr	Val	Gly	Val	Cys	Arg	Asp	
				350					355					360	
Asp	Val	Asp	Arg	Gly	Lys	Asn	Asn	Val	Thr	Leu	Ser	Pro	Asn	Asn	
				365					370					375	
Gly	Tyr	Trp	Val	Leu	Arg	Leu	Thr	Thr	Glu	His	Leu	Tyr	Phe	Thr	
				380					385					390	
Phe	Asn	Pro	His	Phe	Ile	Ser	Leu	Pro	Pro	Ser	Thr	Pro	Pro	Thr	
				395					400					405	
Arg	Val	Gly	Val	Phe	Leu	Asp	Tyr	Glu	Gly	Gly	Thr	Ile	Ser	Phe	
				410					415					420	
Phe	Asn	Thr	Asn	Asp	Gln	Ser	Leu	Ile	Tyr	Thr	Leu	Leu	Thr	Cys	
				425					430					435	
Gln	Phe	Glu	Gly	Leu	Leu	Arg	Pro	Tyr	Ile	Gln	His	Ala	Met	Tyr	
				440					445					450	
Asp	Glu	Glu	Lys	Gly	Thr	Pro	Ile	Phe	Ile	Cys	Pro	Val	Ser	Trp	
				455					460					465	
Gly															

<210> 317
 <211> 681
 <212> DNA
 <213> Homo Sapien

<400> 317
 gcacctgcga ccaccgtgag cagtcattggc gtactccaca gtgcagagag 50
 tcgctctggc ttctgggctt gtctggctc tgctgctgct gctgcccaag 100
 gccttctctgt cccgcgggaa gcggcaggag ccgccgccga cacctgaagg 150
 aaaattgggc cgatttcac ctatgatgca tcatcaccag gcacctcag 200
 atggccagac tcttggggct cgtttccaga ggtctcacct tgccgaggca 250

tttgcaaagg ccaaaggatc aggtggaggt gctggaggag gaggtagtgg 300
aagaggtctg atggggcaga ttattccaat ctacggtttt gggatttttt 350
tatatatact gtacattcta ttttaaggtaa gtagaatcat cctaatacata 400
ttacatcaat gaaaatctaa tatggcgata aaaatcattg tctacattaa 450
aacttcttat agttcataaa attattttcaa atccatcatc tcttttaaate 500
ctgcctctct ttcattgaggt acttaggata gccattattt cagtttcaca 550
taagaatggt tactcaatgt ttaagtgttt tgccccaaaa ttcacaacta 600
acaaggcaga actaggactt gaacatggat cttttgggtc ttaatccagt 650
gagtgatata attcaatgca ctcccctgcc a 681

<210> 318
<211> 128
<212> PRT
<213> Homo Sapien

<400> 318
Met Ala Tyr Ser Thr Val Gln Arg Val Ala Leu Ala Ser Gly Leu
1 5 10 15
Val Leu Ala Leu Ser Leu Leu Leu Pro Lys Ala Phe Leu Ser Arg
20 25 30
Gly Lys Arg Gln Glu Pro Pro Pro Thr Pro Glu Gly Lys Leu Gly
35 40 45
Arg Phe Pro Pro Met Met His His His Gln Ala Pro Ser Asp Gly
50 55 60
Gln Thr Pro Gly Ala Arg Phe Gln Arg Ser His Leu Ala Glu Ala
65 70 75
Phe Ala Lys Ala Lys Gly Ser Gly Gly Gly Ala Gly Gly Gly Gly
80 85 90
Ser Gly Arg Gly Leu Met Gly Gln Ile Ile Pro Ile Tyr Gly Phe
95 100 105
Gly Ile Phe Leu Tyr Ile Leu Tyr Ile Leu Phe Lys Val Ser Arg
110 115 120
Ile Ile Leu Ile Ile Leu His Gln
125

<210> 319
<211> 2103
<212> DNA
<213> Homo Sapien

<400> 319
ccttcacagg actcttcatt gctgggtggc aatgatgtat cggccagatg 50

tgtcatctgt gagcaatagt tgaaacttta tgtacataga gaaatagata 1550
 atacaatatt acattacagc ctgtattcat ttgttctcta gaagttttgt 1600
 cagaattttg acttggtgac ataaatttgt aatgcatata tacaatttga 1650
 agcactcctt ttcttcagtt cctcagctcc tctcatttca gcaaatatcc 1700
 attttcaagg tgcagaacaa ggagtgaag aaaatataag aagaaaaaaa 1750
 tcccctacat tttattggca cagaaaagta ttaggtgttt ttcttagtgg 1800
 aatattagaa atgatcatat tcattatgaa aggtcaagca aagacagcag 1850
 aataccaatc acttcatcat ttaggaagta tgggaactaa gttaaggaag 1900
 tccagaaaga agccaagata tacccttatt ttcatttcca aacaactact 1950
 atgataaatg tgaagaagat tctgtttttt tgtgacctat aataattata 2000
 caaacttcat gcaatgtact tgttctaagc aaattaaagc aaatatttat 2050
 ttaacattgt tactgaggat gtcaacatat aacaataaaa tataaatcac 2100
 cca 2103

<210> 320
 <211> 423
 <212> PRT
 <213> Homo Sapien

<400> 320
 Met Met Tyr Arg Pro Asp Val Val Arg Ala Arg Lys Arg Val Cys
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 Trp Glu Pro Trp Val Ile Gly Leu Val Ile Phe Ile Ser Leu Ile
 20 25 30
 Val Leu Ala Val Cys Ile Gly Leu Thr Val His Tyr Val Arg Tyr
 35 40 45
 Asn Gln Lys Lys Thr Tyr Asn Tyr Tyr Ser Thr Leu Ser Phe Thr
 50 55 60
 Thr Asp Lys Leu Tyr Ala Glu Phe Gly Arg Glu Ala Ser Asn Asn
 65 70 75
 Phe Thr Glu Met Ser Gln Arg Leu Glu Ser Met Val Lys Asn Ala
 80 85 90
 Phe Tyr Lys Ser Pro Leu Arg Glu Glu Phe Val Lys Ser Gln Val
 95 100 105
 Ile Lys Phe Ser Gln Gln Lys His Gly Val Leu Ala His Met Leu
 110 115 120
 Leu Ile Cys Arg Phe His Ser Thr Glu Asp Pro Glu Thr Val Asp
 125 130 135

Lys Ile Val Gln	Leu Val Leu His Glu	Lys Leu Gln Asp Ala Val	140	145	150
Gly Pro Pro Lys	Val Asp Pro His Ser	Val Lys Ile Lys Lys Ile	155	160	165
Asn Lys Thr Glu	Thr Asp Ser Tyr Leu	Asn His Cys Cys Gly Thr	170	175	180
Arg Arg Ser Lys	Thr Leu Gly Gln Ser	Leu Arg Ile Val Gly Gly	185	190	195
Thr Glu Val Glu	Glu Gly Glu Trp Pro	Trp Gln Ala Ser Leu Gln	200	205	210
Trp Asp Gly Ser	His Arg Cys Gly Ala	Thr Leu Ile Asn Ala Thr	215	220	225
Trp Leu Val Ser	Ala Ala His Cys Phe	Thr Thr Tyr Lys Asn Pro	230	235	240
Ala Arg Trp Thr	Ala Ser Phe Gly Val	Thr Ile Lys Pro Ser Lys	245	250	255
Met Lys Arg Gly	Leu Arg Arg Ile Ile	Val His Glu Lys Tyr Lys	260	265	270
His Pro Ser His	Asp Tyr Asp Ile Ser	Leu Ala Glu Leu Ser Ser	275	280	285
Pro Val Pro Tyr	Thr Asn Ala Val His	Arg Val Cys Leu Pro Asp	290	295	300
Ala Ser Tyr Glu	Phe Gln Pro Gly Asp	Val Met Phe Val Thr Gly	305	310	315
Phe Gly Ala Leu	Lys Asn Asp Gly Tyr	Ser Gln Asn His Leu Arg	320	325	330
Gln Ala Gln Val	Thr Leu Ile Asp Ala	Thr Thr Cys Asn Glu Pro	335	340	345
Gln Ala Tyr Asn	Asp Ala Ile Thr Pro	Arg Met Leu Cys Ala Gly	350	355	360
Ser Leu Glu Gly	Lys Thr Asp Ala Cys	Gln Gly Asp Ser Gly Gly	365	370	375
Pro Leu Val Ser	Ser Asp Ala Arg Asp	Ile Trp Tyr Leu Ala Gly	380	385	390
Ile Val Ser Trp	Gly Asp Glu Cys Ala	Lys Pro Asn Lys Pro Gly	395	400	405
Val Tyr Thr Arg	Val Thr Ala Leu Arg	Asp Trp Ile Thr Ser Lys	410	415	420
Thr Gly Ile					

<210> 321
 <211> 1034
 <212> DNA
 <213> Homo Sapien

<400> 321
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 gctcgagacc ataactgttt ggctttaaca gtacgtgggc ggccggaatc 150
 cgggagtcgg gtgaccggg ctgtggtcta gcataaaggc ggagcccaga 200
 agaaggggcg gggatatggga gaagcctccc cacctgcccc cgcaaggcgg 250
 catctgctgg tctgtctgt gctcctctct accctggtga tcccctccgc 300
 tgcagctcct atccatgatg ctgacgccc agagagctcc ttgggtctca 350
 caggcctcca gagcctactc caaggcttca gccgactttt cctgaaagg 400
 aacctgcttc ggggcataga cagcttattc tctgccccca tggacttccg 450
 gggcctccct gggaactacc acaaagagga gaaccaggag caccagctgg 500
 ggaacaacac cctctccagc cacctccaga tcgacaagat gaccgacaac 550
 aagacaggag aggtgctgat ctccgagaat gtggtggcat ccattcaacc 600
 agcggagggg agcttcgagg gtgatttgaa ggtaccagg atggaggaga 650
 aggaggccct ggtaccatc cagaaggcca cggacagctt ccacacagaa 700
 ctccatcccc ggggtggcctt ctggatcatt aagctgccac ggcggaggtc 750
 ccaccaggat gccctggagg gcgccactg gctcagcgag aagcgacacc 800
 gcctgcaggc catccgggat ggactccgca aggggacca caaggacgtc 850
 ctagaagagg ggaccgagag ctctcccac tccaggctgt cccccgaaa 900
 gaccactta ctgtacatcc tcaggccctc tcggcagctg taggggtggg 950
 gaccggggag cacctgcctg tagcccccac cagaccctgc cccaagcacc 1000
 atatggaaat aaagttcttt cttacatcta aaaa 1034

<210> 322
 <211> 242
 <212> PRT
 <213> Homo Sapien

<400> 322
 Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu
 1 5 10 15

Val	Leu	Leu	Leu	Leu	Leu	Ser	Thr	Leu	Val	Ile	Pro	Ser	Ala	Ala	
				20					25					30	
Ala	Pro	Ile	His	Asp	Ala	Asp	Ala	Gln	Glu	Ser	Ser	Leu	Gly	Leu	
				35					40					45	
Thr	Gly	Leu	Gln	Ser	Leu	Leu	Gln	Gly	Phe	Ser	Arg	Leu	Phe	Leu	
				50					55					60	
Lys	Gly	Asn	Leu	Leu	Arg	Gly	Ile	Asp	Ser	Leu	Phe	Ser	Ala	Pro	
				65					70					75	
Met	Asp	Phe	Arg	Gly	Leu	Pro	Gly	Asn	Tyr	His	Lys	Glu	Glu	Asn	
				80					85					90	
Gln	Glu	His	Gln	Leu	Gly	Asn	Asn	Thr	Leu	Ser	Ser	His	Leu	Gln	
				95					100					105	
Ile	Asp	Lys	Met	Thr	Asp	Asn	Lys	Thr	Gly	Glu	Val	Leu	Ile	Ser	
				110					115					120	
Glu	Asn	Val	Val	Ala	Ser	Ile	Gln	Pro	Ala	Glu	Gly	Ser	Phe	Glu	
				125					130					135	
Gly	Asp	Leu	Lys	Val	Pro	Arg	Met	Glu	Glu	Lys	Glu	Ala	Leu	Val	
				140					145					150	
Pro	Ile	Gln	Lys	Ala	Thr	Asp	Ser	Phe	His	Thr	Glu	Leu	His	Pro	
				155					160					165	
Arg	Val	Ala	Phe	Trp	Ile	Ile	Lys	Leu	Pro	Arg	Arg	Arg	Ser	His	
				170					175					180	
Gln	Asp	Ala	Leu	Glu	Gly	Gly	His	Trp	Leu	Ser	Glu	Lys	Arg	His	
				185					190					195	
Arg	Leu	Gln	Ala	Ile	Arg	Asp	Gly	Leu	Arg	Lys	Gly	Thr	His	Lys	
				200					205					210	
Asp	Val	Leu	Glu	Glu	Gly	Thr	Glu	Ser	Ser	Ser	His	Ser	Arg	Leu	
				215					220					225	
Ser	Pro	Arg	Lys	Thr	His	Leu	Leu	Tyr	Ile	Leu	Arg	Pro	Ser	Arg	
				230					235					240	

Gln Leu

<210> 323

<211> 2397

<212> DNA

<213> Homo Sapien

<400> 323

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cgaagaagtt cctgccccg atgagcccc gccgtgcgtc cccgactatc 100

cccaggcggg cgtggggcac cgggccagc gccgacgac gctgccgttt 150
 tgcccttggg agtaggatgt ggtgaaagga tggggcttct cccttacggg 200
 gctcacaatg gccagagaag attccgtgaa gtgtctgcgc tgcttgcctc 250
 acgccctcaa tctgctcttt tggttaatgt ccatcagtggt gttggcagtt 300
 tctgcttgga tgagggacta cctaaataat gttctcactt taactgcaga 350
 aacgagggta gaggaagcag tcattttgac ttactttcct gtggttcac 400
 cggtcacgat tgctgtttgc tgtttcctta tcattgtggg gatgttagga 450
 tattgtggaa cggtgaaaag aaatctgttg cttcttgcat ggtactttgg 500
 aagtttgctt gtcattttct gtgtagaact ggcttgtggc gtttgacat 550
 atgaacagga acttatggtt ccagtacaat ggtcagatat ggtcactttg 600
 aaagccagga tgacaaatta tggattacct agatatcggg ggcttactca 650
 tgcttggaat ttttttcaga gagagtttaa gtgctgtgga gtagtatatt 700
 tcaactgactg gttggaaatg acagagatgg actggcccc agattcctgc 750
 tgtgttagag aattcccagg atgttccaaa caggcccacc aggaagatct 800
 cagtgcctt tatcaagagg gttgtgggaa gaaaatgtat tcctttttga 850
 gaggaaccaa acaactgcag gtgctgaggt ttctgggaat ctccattggg 900
 gtgacacaaa tcctggccat gattctcacc attactctgc tctgggctct 950
 gtattatgat agaagggagc ctgggacaga ccaaatgatg tccttgaaga 1000
 atgacaactc tcagcacctg tcatgtccct cagtagaact gttgaaacca 1050
 agcctgtcaa gaatctttga acacacatcc atggcaaaca gctttaatac 1100
 acactttgag atggaggagt tataaaaaga aatgtcacag aagaaaacca 1150
 caaacttggt ttattggact tgtgaatttt tgagtacata ctatgtgttt 1200
 cagaaatatg tagaaataaa aatgttgcca taaaataaca cctaagcata 1250
 tactattcta tgctttaaaa tgaggatgga aaagtttcat gtcataagtc 1300
 accacctgga caataattga tgcccttaa atgctgaaga cagatgtcat 1350
 acccactgtg tagcctgtgt atgactttta ctgaacacag ttatgttttg 1400
 aggccagcatg gtttgattag catttccgca tccatgcaaa cgagtcacat 1450
 atggtgggac tggagccata gtaaagggtt atttacttct accaactagt 1500
 atataaagta ctaattaaat gctaacatag gaagttagaa aataactaata 1550

acttttatta ctcagcgatc tattcttctg atgctaaata aattatatat 1600
cagaaaactt tcaatattgg tgactaccta aatgtgattt ttgctgggta 1650
ctaaaatatt cttaccactt aaaagagcaa gctaacacat tgtcttaagc 1700
tgatcagggg ttttttgtat ataagtctgt gttaaatctg tataattcag 1750
tcgatttcag ttctgataat gttagaata accattatga aaaggaaaat 1800
ttgtcctgta tagcatcatt attttttagcc tttcctggtta ataaagcttt 1850
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taaccactaa ttttgaaaat taccagtgtg atacatagga atcattattc 1950
agaatgtagt ctgggtcttta ggaagtatta ataagaaaat ttgcacataa 2000
cttagttgat tcagaaagga cttgtatgct gtttttctcc caaatgaaga 2050
ctctttttga cactaaacac tttttaaaaa gcttatcttt gccttctcca 2100
aacaagaagc aatagtctcc aagtcaatat aaattctaca gaaaatagtg 2150
ttctttttct ccagaaaaat gcttgtgaga atcattaaaa catgtgacaa 2200
tttagagatt ctttgtttta tttcactgat taatatactg tggcaaatta 2250
cacagattat taaatttttt tacaagagta tagtatattt atttgaaatg 2300
ggaaaagtgc attttactgt attttgtgta ttttgtttat ttctcagaat 2350
atggaaagaa aattaaaatg tgtcaataaa tattttctag agagtaa 2397

<210> 324
<211> 305
<212> PRT
<213> Homo Sapien

<400> 324
Met Ala Arg Glu Asp Ser Val Lys Cys Leu Arg Cys Leu Leu Tyr
1 5 10 15
Ala Leu Asn Leu Leu Phe Trp Leu Met Ser Ile Ser Val Leu Ala
20 25 30
Val Ser Ala Trp Met Arg Asp Tyr Leu Asn Asn Val Leu Thr Leu
35 40 45
Thr Ala Glu Thr Arg Val Glu Glu Ala Val Ile Leu Thr Tyr Phe
50 55 60
Pro Val Val His Pro Val Met Ile Ala Val Cys Cys Phe Leu Ile
65 70 75
Ile Val Gly Met Leu Gly Tyr Cys Gly Thr Val Lys Arg Asn Leu
80 85 90

Leu	Leu	Leu	Ala	Trp	Tyr	Phe	Gly	Ser	Leu	Leu	Val	Ile	Phe	Cys	
				95					100					105	
Val	Glu	Leu	Ala	Cys	Gly	Val	Trp	Thr	Tyr	Glu	Gln	Glu	Leu	Met	
				110					115					120	
Val	Pro	Val	Gln	Trp	Ser	Asp	Met	Val	Thr	Leu	Lys	Ala	Arg	Met	
				125					130					135	
Thr	Asn	Tyr	Gly	Leu	Pro	Arg	Tyr	Arg	Trp	Leu	Thr	His	Ala	Trp	
				140					145					150	
Asn	Phe	Phe	Gln	Arg	Glu	Phe	Lys	Cys	Cys	Gly	Val	Val	Tyr	Phe	
				155					160					165	
Thr	Asp	Trp	Leu	Glu	Met	Thr	Glu	Met	Asp	Trp	Pro	Pro	Asp	Ser	
				170					175					180	
Cys	Cys	Val	Arg	Glu	Phe	Pro	Gly	Cys	Ser	Lys	Gln	Ala	His	Gln	
				185					190					195	
Glu	Asp	Leu	Ser	Asp	Leu	Tyr	Gln	Glu	Gly	Cys	Gly	Lys	Lys	Met	
				200					205					210	
Tyr	Ser	Phe	Leu	Arg	Gly	Thr	Lys	Gln	Leu	Gln	Val	Leu	Arg	Phe	
				215					220					225	
Leu	Gly	Ile	Ser	Ile	Gly	Val	Thr	Gln	Ile	Leu	Ala	Met	Ile	Leu	
				230					235					240	
Thr	Ile	Thr	Leu	Leu	Trp	Ala	Leu	Tyr	Tyr	Asp	Arg	Arg	Glu	Pro	
				245					250					255	
Gly	Thr	Asp	Gln	Met	Met	Ser	Leu	Lys	Asn	Asp	Asn	Ser	Gln	His	
				260					265					270	
Leu	Ser	Cys	Pro	Ser	Val	Glu	Leu	Leu	Lys	Pro	Ser	Leu	Ser	Arg	
				275					280					285	
Ile	Phe	Glu	His	Thr	Ser	Met	Ala	Asn	Ser	Phe	Asn	Thr	His	Phe	
				290					295					300	
Glu	Met	Glu	Glu	Leu											
				305											

<210> 325

<211> 2212

<212> DNA

<213> Homo Sapien

<400> 325

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ctgttcacgg ttggggatat tttctcgact gcatggaatc agaaagaagc 200

				140					145					150
Leu	Gln	Thr	Leu	Pro 155	Lys	Asp	Ile	Phe	Lys 160	Gly	Leu	Asp	Ser	Leu 165
Thr	Asn	Val	Asp	Leu 170	Arg	Gly	Asn	Ser	Phe 175	Asn	Cys	Asp	Cys	Lys 180
Leu	Lys	Trp	Leu	Val 185	Glu	Trp	Leu	Gly	His 190	Thr	Asn	Ala	Thr	Val 195
Glu	Asp	Ile	Tyr	Cys 200	Glu	Gly	Pro	Pro	Glu 205	Tyr	Lys	Lys	Arg	Lys 210
Ile	Asn	Ser	Leu	Ser 215	Ser	Lys	Asp	Phe	Asp 220	Cys	Ile	Ile	Thr	Glu 225
Phe	Ala	Lys	Ser	Gln 230	Asp	Leu	Pro	Tyr	Gln 235	Ser	Leu	Ser	Ile	Asp 240
Thr	Phe	Ser	Tyr	Leu 245	Asn	Asp	Glu	Tyr	Val 250	Val	Ile	Ala	Gln	Pro 255
Phe	Thr	Gly	Lys	Cys 260	Ile	Phe	Leu	Glu	Trp 265	Asp	His	Val	Glu	Lys 270
Thr	Phe	Arg	Asn	Tyr 275	Asp	Asn	Ile	Thr	Gly 280	Thr	Ser	Thr	Val	Val 285
Cys	Lys	Pro	Ile	Val 290	Ile	Glu	Thr	Gln	Leu 295	Tyr	Val	Ile	Val	Ala 300
Gln	Leu	Phe	Gly	Gly 305	Ser	His	Ile	Tyr	Lys 310	Arg	Asp	Ser	Phe	Ala 315
Asn	Lys	Phe	Ile	Lys 320	Ile	Gln	Asp	Ile	Glu 325	Ile	Leu	Lys	Ile	Arg 330
Lys	Pro	Asn	Asp	Ile 335	Glu	Thr	Phe	Lys	Ile 340	Glu	Asn	Asn	Trp	Tyr 345
Phe	Val	Val	Ala	Asp 350	Ser	Ser	Lys	Ala	Gly 355	Phe	Thr	Thr	Ile	Tyr 360
Lys	Trp	Asn	Gly	Asn 365	Gly	Phe	Tyr	Ser	His 370	Gln	Ser	Leu	His	Ala 375
Trp	Tyr	Arg	Asp	Thr 380	Asp	Val	Glu	Tyr	Leu 385	Glu	Ile	Val	Arg	Thr 390
Pro	Gln	Thr	Leu	Arg 395	Thr	Pro	His	Leu	Ile 400	Leu	Ser	Ser	Ser	Ser 405
Gln	Arg	Pro	Val	Ile 410	Tyr	Gln	Trp	Asn	Lys 415	Ala	Thr	Gln	Leu	Phe 420
Thr	Asn	Gln	Thr	Asp 425	Ile	Pro	Asn	Met	Glu 430	Asp	Val	Tyr	Ala	Val 435

Lys His Phe Ser Val Lys Gly Asp Val Tyr Ile Cys Leu Thr Arg
 440 445 450
 Phe Ile Gly Asp Ser Lys Val Met Lys Trp Gly Gly Ser Ser Phe
 455 460 465
 Gln Asp Ile Gln Arg Met Pro Ser Arg Gly Ser Met Val Phe Gln
 470 475 480
 Pro Leu Gln Ile Asn Asn Tyr Gln Tyr Ala Ile Leu Gly Ser Asp
 485 490 495
 Tyr Ser Phe Thr Gln Val Tyr Asn Trp Asp Ala Glu Lys Ala Lys
 500 505 510
 Phe Val Lys Phe Gln Glu Leu Asn Val Gln Ala Pro Arg Ser Phe
 515 520 525
 Thr His Val Ser Ile Asn Lys Arg Asn Phe Leu Phe Ala Ser Ser
 530 535 540
 Phe Lys Gly Asn Thr Gln Ile Tyr Lys His Val Ile Val Asp Leu
 545 550 555
 Ser Ala

<210> 327
 <211> 2339
 <212> DNA
 <213> Homo Sapien

<400> 327
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 gaggccttaa aaaaaaaagt gcttgaaaga gaaggggaca aaggaacacc 150
 agtattaaga ggattttcca gtgtttctgg cagttggtcc agaaggatgc 200
 ctccattcct gcttctcacc tgctcttcca tcacaggcac ctccgtgtca 250
 cccgtggccc tagatccttg ttctgcttac atcagcctga atgagccctg 300
 gaggaacact gaccaccagt tggatgagtc tcaaggctct cctctatgtg 350
 acaaccatgt gaatggggag tggatccact tcacgggcat ggcgggagat 400
 gccatgccta ctttctgcat accagaaaac cactgtggaa cccacgcacc 450
 tgtctggctc aatggcagcc accccctaga aggcgacggc attgtgcaac 500
 gccaggcttg tgccagcttc aatgggaact gctgtctctg gaacaccacg 550
 gtggaagtca aggcttgccc tggaggctac tatgtgtatc gtctgaccaa 600
 gccacagcgtc tgcttccacg tctactgtgg tcatttttat gacatctgcg 650

catttctttc ctacacttaa atacctcgtg tatgggtgcaa tcagaccaca 2150
aatcagaag ctgggtataa tatttcaagt tacaaaccct agaaaaatta 2200
aacagttact gaaattatga cttaaatacc caatgactcc ttaaatatgt 2250
aaattatagt tataccttga aatttcaatt caaatgcaga ctaattatag 2300
ggaatttgga agtgtatcaa taaaacagta tataattttt 2339

<210> 328

<211> 545

<212> PRT

<213> Homo Sapien

<400> 328

Met	Pro	Pro	Phe	Leu	Leu	Leu	Thr	Cys	Leu	Phe	Ile	Thr	Gly	Thr	1	5	10	15
Ser	Val	Ser	Pro	Val	Ala	Leu	Asp	Pro	Cys	Ser	Ala	Tyr	Ile	Ser	20	25	30	
Leu	Asn	Glu	Pro	Trp	Arg	Asn	Thr	Asp	His	Gln	Leu	Asp	Glu	Ser	35	40	45	
Gln	Gly	Pro	Pro	Leu	Cys	Asp	Asn	His	Val	Asn	Gly	Glu	Trp	Tyr	50	55	60	
His	Phe	Thr	Gly	Met	Ala	Gly	Asp	Ala	Met	Pro	Thr	Phe	Cys	Ile	65	70	75	
Pro	Glu	Asn	His	Cys	Gly	Thr	His	Ala	Pro	Val	Trp	Leu	Asn	Gly	80	85	90	
Ser	His	Pro	Leu	Glu	Gly	Asp	Gly	Ile	Val	Gln	Arg	Gln	Ala	Cys	95	100	105	
Ala	Ser	Phe	Asn	Gly	Asn	Cys	Cys	Leu	Trp	Asn	Thr	Thr	Val	Glu	110	115	120	
Val	Lys	Ala	Cys	Pro	Gly	Gly	Tyr	Tyr	Val	Tyr	Arg	Leu	Thr	Lys	125	130	135	
Pro	Ser	Val	Cys	Phe	His	Val	Tyr	Cys	Gly	His	Phe	Tyr	Asp	Ile	140	145	150	
Cys	Asp	Glu	Asp	Cys	His	Gly	Ser	Cys	Ser	Asp	Thr	Ser	Glu	Cys	155	160	165	
Thr	Cys	Ala	Pro	Gly	Thr	Val	Leu	Gly	Pro	Asp	Arg	Gln	Thr	Cys	170	175	180	
Phe	Asp	Glu	Asn	Glu	Cys	Glu	Gln	Asn	Asn	Gly	Gly	Cys	Ser	Glu	185	190	195	
Ile	Cys	Val	Asn	Leu	Lys	Asn	Ser	Tyr	Arg	Cys	Glu	Cys	Gly	Val	200	205	210	

Gly	Arg	Val	Leu	Arg 215	Ser	Asp	Gly	Lys	Thr 220	Cys	Glu	Asp	Val	Glu 225
Gly	Cys	His	Asn	Asn 230	Asn	Gly	Gly	Cys	Ser 235	His	Ser	Cys	Leu	Gly 240
Ser	Glu	Lys	Gly	Tyr 245	Gln	Cys	Glu	Cys	Pro 250	Arg	Gly	Leu	Val	Leu 255
Ser	Glu	Asp	Asn	His 260	Thr	Cys	Gln	Val	Pro 265	Val	Leu	Cys	Lys	Ser 270
Asn	Ala	Ile	Glu	Val 275	Asn	Ile	Pro	Arg	Glu 280	Leu	Val	Gly	Gly	Leu 285
Glu	Leu	Phe	Leu	Thr 290	Asn	Thr	Ser	Cys	Arg 295	Gly	Val	Ser	Asn	Gly 300
Thr	His	Val	Asn	Ile 305	Leu	Phe	Ser	Leu	Lys 310	Thr	Cys	Gly	Thr	Val 315
Val	Asp	Val	Val	Asn 320	Asp	Lys	Ile	Val	Ala 325	Ser	Asn	Leu	Val	Thr 330
Gly	Leu	Pro	Lys	Gln 335	Thr	Pro	Gly	Ser	Ser 340	Gly	Asp	Phe	Ile	Ile 345
Arg	Thr	Ser	Lys	Leu 350	Leu	Ile	Pro	Val	Thr 355	Cys	Glu	Phe	Pro	Arg 360
Leu	Tyr	Thr	Ile	Ser 365	Glu	Gly	Tyr	Val	Pro 370	Asn	Leu	Arg	Asn	Ser 375
Pro	Leu	Glu	Ile	Met 380	Ser	Arg	Asn	His	Gly 385	Ile	Phe	Pro	Phe	Thr 390
Leu	Glu	Ile	Phe	Lys 395	Asp	Asn	Glu	Phe	Glu 400	Glu	Pro	Tyr	Arg	Glu 405
Ala	Leu	Pro	Thr	Leu 410	Lys	Leu	Arg	Asp	Ser 415	Leu	Tyr	Phe	Gly	Ile 420
Glu	Pro	Val	Val	His 425	Val	Ser	Gly	Leu	Glu 430	Ser	Leu	Val	Glu	Ser 435
Cys	Phe	Ala	Thr	Pro 440	Thr	Ser	Lys	Ile	Asp 445	Glu	Val	Leu	Lys	Tyr 450
Tyr	Leu	Ile	Arg	Asp 455	Gly	Cys	Val	Ser	Asp 460	Asp	Ser	Val	Lys	Gln 465
Tyr	Thr	Ser	Arg	Asp 470	His	Leu	Ala	Lys	His 475	Phe	Gln	Val	Pro	Val 480
Phe	Lys	Phe	Val	Gly 485	Lys	Asp	His	Lys	Glu 490	Val	Phe	Leu	His	Cys 495
Arg	Val	Leu	Val	Cys	Gly	Val	Leu	Asp	Glu	Arg	Ser	Arg	Cys	Ala

	500		505		510
Gln Gly Cys His Arg Arg Met Arg Arg Gly Ala Gly Gly Glu Asp					
	515		520		525
Ser Ala Gly Leu Gln Gly Gln Thr Leu Thr Gly Gly Pro Ile Arg					
	530		535		540
Ile Asp Trp Glu Asp					
	545				

<210> 329

<211> 2063

<212> DNA

<213> Homo Sapien

<400> 329

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cttgggggtga caatctcagc tccaggctac agggagaccg ggaggatcac 200

agagccagca tggtacagga tcctgacagt gatcaacctc tgaacagcct 250

cgatgtcaaa cccctgcgca aaccccgat ccccatggag accttcagaa 300

aggtggggat ccccatcatc atagcactac tgagcctggc gagtatcatc 350

attgtggttg tcctcatcaa ggtgattctg gataaatact acttcctctg 400

cgggcagcct ctccacttca tcccaggagaa gcagctgtgt gacggagagc 450

tggactgtcc cttgggggag gacgaggagc actgtgtcaa gagcttcccc 500

gaagggcctg cagtggcagt ccgcctctcc aaggaccgat ccacactgca 550

ggtgctggac tcggccacag ggaactggtt ctctgcctgt ttcgacaact 600

tcacagaagc tctcgtgag acagcctgta ggcagatggg ctacagcaga 650

gctgtggaga ttggcccaga ccaggatctg gatgttggtg aaatcacaga 700

aaacagccag gagcttcgca tgcggaactc aagtgggccc tgtctctcag 750

gctccctggt ctccctgcac tgtcttgctt gtgggaagag cctgaagacc 800

ccccgtgtgg tgggtgggga ggaggcctct gtggattctt ggccttggca 850

ggtcagcatc cagtacgaca aacagcacgt ctgtggaggg agcatcctgg 900

acccccactg ggtcctcacg gcagcccact gcttcaggaa acataccgat 950

gtgttcaact ggaaggtgcy ggcaggctca gacaaactgg gcagcttccc 1000

atccctggct gtggccaaga tcatcatcat tgaattcaac cccatgtacc 1050

ccaaagacaa tgacatcgcc ctcatgaagc tgcagttccc actcactttc 1100
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tccagccacc ccactctgga tcattggatg gggctttacg aagcagaatg 1200
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aatgcactgc cctactgttg gtatgactac cgttacctac tgttgtcatt 2000
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caaaaaaaaaaaa aaa 2063

<210> 330

<211> 432

<212> PRT

<213> Homo Sapien

<400> 330

Met	Leu	Gln	Asp	Pro	Asp	Ser	Asp	Gln	Pro	Leu	Asn	Ser	Leu	Asp
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Val	Lys	Pro	Leu	Arg	Lys	Pro	Arg	Ile	Pro	Met	Glu	Thr	Phe	Arg
			20					25					30	
Lys	Val	Gly	Ile	Pro	Ile	Ile	Ile	Ala	Leu	Leu	Ser	Leu	Ala	Ser
			35					40					45	
Ile	Ile	Ile	Val	Val	Val	Leu	Ile	Lys	Val	Ile	Leu	Asp	Lys	Tyr

				50					55					60
Tyr	Phe	Leu	Cys	Gly 65	Gln	Pro	Leu	His	Phe 70	Ile	Pro	Arg	Lys	Gln 75
Leu	Cys	Asp	Gly	Glu 80	Leu	Asp	Cys	Pro	Leu 85	Gly	Glu	Asp	Glu	Glu 90
His	Cys	Val	Lys	Ser 95	Phe	Pro	Glu	Gly	Pro 100	Ala	Val	Ala	Val	Arg 105
Leu	Ser	Lys	Asp	Arg 110	Ser	Thr	Leu	Gln	Val 115	Leu	Asp	Ser	Ala	Thr 120
Gly	Asn	Trp	Phe	Ser 125	Ala	Cys	Phe	Asp	Asn 130	Phe	Thr	Glu	Ala	Leu 135
Ala	Glu	Thr	Ala	Cys 140	Arg	Gln	Met	Gly	Tyr 145	Ser	Arg	Ala	Val	Glu 150
Ile	Gly	Pro	Asp	Gln 155	Asp	Leu	Asp	Val	Val 160	Glu	Ile	Thr	Glu	Asn 165
Ser	Gln	Glu	Leu	Arg 170	Met	Arg	Asn	Ser	Ser 175	Gly	Pro	Cys	Leu	Ser 180
Gly	Ser	Leu	Val	Ser 185	Leu	His	Cys	Leu	Ala 190	Cys	Gly	Lys	Ser	Leu 195
Lys	Thr	Pro	Arg	Val 200	Val	Gly	Gly	Glu	Glu 205	Ala	Ser	Val	Asp	Ser 210
Trp	Pro	Trp	Gln	Val 215	Ser	Ile	Gln	Tyr	Asp 220	Lys	Gln	His	Val	Cys 225
Gly	Gly	Ser	Ile	Leu 230	Asp	Pro	His	Trp	Val 235	Leu	Thr	Ala	Ala	His 240
Cys	Phe	Arg	Lys	His 245	Thr	Asp	Val	Phe	Asn 250	Trp	Lys	Val	Arg	Ala 255
Gly	Ser	Asp	Lys	Leu 260	Gly	Ser	Phe	Pro	Ser 265	Leu	Ala	Val	Ala	Lys 270
Ile	Ile	Ile	Ile	Glu 275	Phe	Asn	Pro	Met	Tyr 280	Pro	Lys	Asp	Asn	Asp 285
Ile	Ala	Leu	Met	Lys 290	Leu	Gln	Phe	Pro	Leu 295	Thr	Phe	Ser	Gly	Thr 300
Val	Arg	Pro	Ile	Cys 305	Leu	Pro	Phe	Phe	Asp 310	Glu	Glu	Leu	Thr	Pro 315
Ala	Thr	Pro	Leu	Trp 320	Ile	Ile	Gly	Trp	Gly 325	Phe	Thr	Lys	Gln	Asn 330
Gly	Gly	Lys	Met	Ser 335	Asp	Ile	Leu	Leu	Gln 340	Ala	Ser	Val	Gln	Val 345

Ile	Asp	Ser	Thr	Arg	Cys	Asn	Ala	Asp	Asp	Ala	Tyr	Gln	Gly	Glu
				350					355					360
Val	Thr	Glu	Lys	Met	Met	Cys	Ala	Gly	Ile	Pro	Glu	Gly	Gly	Val
				365					370					375
Asp	Thr	Cys	Gln	Gly	Asp	Ser	Gly	Gly	Pro	Leu	Met	Tyr	Gln	Ser
				380					385					390
Asp	Gln	Trp	His	Val	Val	Gly	Ile	Val	Ser	Trp	Gly	Tyr	Gly	Cys
				395					400					405
Gly	Gly	Pro	Ser	Thr	Pro	Gly	Val	Tyr	Thr	Lys	Val	Ser	Ala	Tyr
				410					415					420
Leu	Asn	Trp	Ile	Tyr	Asn	Val	Trp	Lys	Ala	Glu	Leu			
				425					430					

<210> 331
 <211> 1797
 <212> DNA
 <213> Homo Sapien

<400> 331
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 aaataagaaa attctcaagg aggacgagct cttgagtgag acccaacaag 150
 ctgcttttca ccaaattgca atggagcctt tcgaaatcaa tgttccaaag 200
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 ctggcacccc aggacccaa ggagagaagg gcagcaaagg cgatgggggt 800
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ggggtctccca ggaagcaaaag gggacagggg catgaaagga gatgcagggg 900
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 acctggactg caggggtgttc cgggccctcc tgggtgcagtg ggacacccag 1050
 gtgccaaggg tgagcctggc agtgctggct cccctgggag agcaggactt 1100
 ccagggagcc ccgggagtc agggagccaca ggctgaaag gaagcaaagg 1150
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<210> 332

<211> 520

<212> PRT

<213> Homo Sapien

<400> 332

Met	Arg	Asn	Lys	Lys	Ile	Leu	Lys	Glu	Asp	Glu	Leu	Leu	Ser	Glu
1				5					10					15
Thr	Gln	Gln	Ala	Ala	Phe	His	Gln	Ile	Ala	Met	Glu	Pro	Phe	Glu
				20					25					30
Ile	Asn	Val	Pro	Lys	Pro	Lys	Arg	Arg	Asn	Gly	Val	Asn	Phe	Ser
				35					40					45
Leu	Ala	Val	Val	Val	Ile	Tyr	Leu	Ile	Leu	Leu	Thr	Ala	Gly	Ala
				50					55					60
Gly	Leu	Leu	Val	Val	Gln	Val	Leu	Asn	Leu	Gln	Ala	Arg	Leu	Arg
				65					70					75

aggtccccta cacagtcccg ggctgccctt ggttctggtg cttctggccc 550
 tgggggccgg gtggggccag gaggggtcag agcccgtcct gctggagggg 600
 gagtgcctgg tggctctgtga gcctggccga gctgctgcag gggggcccg 650
 gggagcagcc ctgggagagg cccccctgg gcgagtggca tttgctgcgg 700
 tccgaagcca ccaccatgag ccagcagggg aaaccggcaa tggcaccagt 750
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 ccgggcctct ggctccttcg tagccctgt ccggggtgtc tacagcttcc 850
 ggttccatgt ggtgaagggtg tacaaccgcc aaactgtcca ggtgagcctg 900
 atgctgaaca cgtggcctgt catctcagcc tttgccaatg atcctgacgt 950
 gaccggggag gcagccacca gctctgtgct actgcccttg gacctgggg 1000
 accgagtgtc tctgcgcctg cgtcggggga atctaactggg tggttggaaa 1050
 tactcaagtt tctctggctt cctcatcttc cctctctgag gacccaagtc 1100
 tttcaagcac aagaatccag cccctgacaa ctttcttctg ccctctcttg 1150
 cccagaaac agcagaggca ggagagagac tccctctggc tcctatccca 1200
 cctctttgca tgggaccctg tgccaaacac ccaagtttaa gagaagagta 1250
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 cagcgtaccc tgcaggcttc ttctgtgag gaaagccagc atcacggatc 1550
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 actgtacctg ttccagcata tcccactat ctctctttct cctgatctgt 2050
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 caactagaga atgggtggta gtgagacact atagaattac taaggagaag 2250
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<210> 334

<211> 205

<212> PRT

<213> Homo Sapien

<400> 334

Met	Leu	Gly	Ala	Lys	Pro	His	Trp	Leu	Pro	Gly	Pro	Leu	His	Ser	1	5	10	15
Pro	Gly	Leu	Pro	Leu	Val	Leu	Val	Leu	Leu	Ala	Leu	Gly	Ala	Gly	20	25	30	
Trp	Ala	Gln	Glu	Gly	Ser	Glu	Pro	Val	Leu	Leu	Glu	Gly	Glu	Cys	35	40	45	
Leu	Val	Val	Cys	Glu	Pro	Gly	Arg	Ala	Ala	Ala	Gly	Gly	Pro	Gly	50	55	60	
Gly	Ala	Ala	Leu	Gly	Glu	Ala	Pro	Pro	Gly	Arg	Val	Ala	Phe	Ala	65	70	75	
Ala	Val	Arg	Ser	His	His	His	Glu	Pro	Ala	Gly	Glu	Thr	Gly	Asn	80	85	90	
Gly	Thr	Ser	Gly	Ala	Ile	Tyr	Phe	Asp	Gln	Val	Leu	Val	Asn	Glu	95	100	105	
Gly	Gly	Gly	Phe	Asp	Arg	Ala	Ser	Gly	Ser	Phe	Val	Ala	Pro	Val	110	115	120	
Arg	Gly	Val	Tyr	Ser	Phe	Arg	Phe	His	Val	Val	Lys	Val	Tyr	Asn	125	130	135	
Arg	Gln	Thr	Val	Gln	Val	Ser	Leu	Met	Leu	Asn	Thr	Trp	Pro	Val	140	145	150	
Ile	Ser	Ala	Phe	Ala	Asn	Asp	Pro	Asp	Val	Thr	Arg	Glu	Ala	Ala	155	160	165	
Thr	Ser	Ser	Val	Leu	Leu	Pro	Leu	Asp	Pro	Gly	Asp	Arg	Val	Ser	170	175	180	

Leu Arg Leu Arg Arg Gly Asn Leu Leu Gly Gly Trp Lys Tyr Ser
 185 190 195

Ser Phe Ser Gly Phe Leu Ile Phe Pro Leu
 200 205

<210> 335
 <211> 1570
 <212> DNA
 <213> Homo Sapien

<400> 335
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 ttcccgctgg gccgtgactg ggcgggcttc agccatgaag accctcatag 200
 ccgcctactc cgggggtcctg cgcggcgagc gtcaggccga ggctgaccgg 250
 agccagcgt ctcacggagg acctgcgtg tcgcgcgagg ggtctgggag 300
 atggggcact ggatccagca tcctctccgc cctccaggac ctcttctctg 350
 tcacctggct caatagggtcc aagggtgaaa agcagctaca ggtcatctca 400
 gtgctccagt gggtcctgtc cttccttgta ctgggagtgg cctgcagtgc 450
 catcctcatg tacatattct gcaactgattg ctggctcatc gctgtgctct 500
 acttcacttg gctgggtgtt gactggaaca caccgaaga aggtggcagg 550
 aggtcacagt ggggtccgaa ctgggctgtg tggcgctact ttcgagacta 600
 ctttcccatc cagctgggtga agacacacaa cctgctgacc accaggaact 650
 atatctttgg ataccacccc catggtatca tgggcctggg tgccttctgc 700
 aacttcagca cagaggccac agaagtgagc aagaagttcc caggcatacg 750
 gccttacctg gctacactgg caggcaactt ccgaatgcct gtgttgaggg 800
 agtacctgat gtctggaggt atctgcctg tcagccggga caccatagac 850
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gacacctggg ggctggtgcc ctactccaag cccatcacca ctgttggtggg 1200
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cacaagacca agttcggcct cccggagact gaggtcctgg aggtgaactg 1350
agccagcctt cggggccaat tccctggagg aaccagctgc aaatcacttt 1400
tttgctctgt aaatttggaa gtgtcatggg tgtctgtggg ttatttataa 1450
gaaattataa caattttgct aaacaaaaaa aaaaaaaaaa aaaaaaaaaa 1500
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1550
aaaaaaaaaa aaaaaaaaaa 1570

<210> 336
<211> 388
<212> PRT
<213> Homo Sapien

<400> 336
Met Lys Thr Leu Ile Ala Ala Tyr Ser Gly Val Leu Arg Gly Glu
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Arg Gln Ala Glu Ala Asp Arg Ser Gln Arg Ser His Gly Gly Pro
20 25 30
Ala Leu Ser Arg Glu Gly Ser Gly Arg Trp Gly Thr Gly Ser Ser
35 40 45
Ile Leu Ser Ala Leu Gln Asp Leu Phe Ser Val Thr Trp Leu Asn
50 55 60
Arg Ser Lys Val Glu Lys Gln Leu Gln Val Ile Ser Val Leu Gln
65 70 75
Trp Val Leu Ser Phe Leu Val Leu Gly Val Ala Cys Ser Ala Ile
80 85 90
Leu Met Tyr Ile Phe Cys Thr Asp Cys Trp Leu Ile Ala Val Leu
95 100 105
Tyr Phe Thr Trp Leu Val Phe Asp Trp Asn Thr Pro Lys Lys Gly
110 115 120
Gly Arg Arg Ser Gln Trp Val Arg Asn Trp Ala Val Trp Arg Tyr
125 130 135
Phe Arg Asp Tyr Phe Pro Ile Gln Leu Val Lys Thr His Asn Leu
140 145 150
Leu Thr Thr Arg Asn Tyr Ile Phe Gly Tyr His Pro His Gly Ile
155 160 165
Met Gly Leu Gly Ala Phe Cys Asn Phe Ser Thr Glu Ala Thr Glu

Val	Ser	Lys	Lys	Phe	Pro	Gly	Ile	Arg	Pro	Tyr	Leu	Ala	Thr	Leu
				185					190					195
Ala	Gly	Asn	Phe	Arg	Met	Pro	Val	Leu	Arg	Glu	Tyr	Leu	Met	Ser
				200					205					210
Gly	Gly	Ile	Cys	Pro	Val	Ser	Arg	Asp	Thr	Ile	Asp	Tyr	Leu	Leu
				215					220					225
Ser	Lys	Asn	Gly	Ser	Gly	Asn	Ala	Ile	Ile	Ile	Val	Val	Gly	Gly
				230					235					240
Ala	Ala	Glu	Ser	Leu	Ser	Ser	Met	Pro	Gly	Lys	Asn	Ala	Val	Thr
				245					250					255
Leu	Arg	Asn	Arg	Lys	Gly	Phe	Val	Lys	Leu	Ala	Leu	Arg	His	Gly
				260					265					270
Ala	Asp	Leu	Val	Pro	Ile	Tyr	Ser	Phe	Gly	Glu	Asn	Glu	Val	Tyr
				275					280					285
Lys	Gln	Val	Ile	Phe	Glu	Glu	Gly	Ser	Trp	Gly	Arg	Trp	Val	Gln
				290					295					300
Lys	Lys	Phe	Gln	Lys	Tyr	Ile	Gly	Phe	Ala	Pro	Cys	Ile	Phe	His
				305					310					315
Gly	Arg	Gly	Leu	Phe	Ser	Ser	Asp	Thr	Trp	Gly	Leu	Val	Pro	Tyr
				320					325					330
Ser	Lys	Pro	Ile	Thr	Thr	Val	Val	Gly	Glu	Pro	Ile	Thr	Ile	Pro
				335					340					345
Lys	Leu	Glu	His	Pro	Thr	Gln	Gln	Asp	Ile	Asp	Leu	Tyr	His	Thr
				350					355					360
Met	Tyr	Met	Glu	Ala	Leu	Val	Lys	Leu	Phe	Asp	Lys	His	Lys	Thr
				365					370					375
Lys	Phe	Gly	Leu	Pro	Glu	Thr	Glu	Val	Leu	Glu	Val	Asn		
				380					385					

<210> 337
 <211> 3060
 <212> DNA
 <213> Homo Sapien

<400> 337
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 cggggccgcg gaggcgacgc cggggacgcc cgcgcgacga gcaggtggcg 150
 gcggctgcag gcttgtccag ccggaagccc tgagggcagc tgttccact 200

ggctctgctg accttggtgcc ttggaagggt gtcctcagcg agggggccgtg 250
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 gttcgtgctg cacctgctgg tcggctttgt ctctgtggtg agtgggtctg 350
 tcatcaactt cgtccagctg tgcacgctgg cgctctggcc ggtcagcaag 400
 cagctctacc gccgcctcaa ctgccgcctc gcctactcac tctggagcca 450
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 cggaccaggc cacggtagag cgctttggga aggagcacgc agtcatcatc 550
 ctcaaccaca acttcgagat cgacttcttc tgtgggtgga ccatgtgtga 600
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 ggacgcgctt cacggagacc aagcaccgcg ttagcatgga ggtggcggct 850
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 cttcaccacc gcagtcaagt gcctccgggg gacagtcgca gctgtctatg 950
 atgtaaccct gaacttcaga ggaaacaaga acccgtcctt gctggggatc 1000
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 ccagggagac tgaagtggga ggatcgcttg ggcagagaa gtcgaggctg 3000
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 accctgtctc 3060

<210> 338
 <211> 368
 <212> PRT
 <213> Homo Sapien

<400> 338

Met	Gly	Leu	Leu	Ala	Phe	Leu	Lys	Thr	Gln	Phe	Val	Leu	His	Leu	1	5	10	15
Leu	Val	Gly	Phe	Val	Phe	Val	Val	Ser	Gly	Leu	Val	Ile	Asn	Phe	20	25	30	
Val	Gln	Leu	Cys	Thr	Leu	Ala	Leu	Trp	Pro	Val	Ser	Lys	Gln	Leu	35	40	45	
Tyr	Arg	Arg	Leu	Asn	Cys	Arg	Leu	Ala	Tyr	Ser	Leu	Trp	Ser	Gln	50	55	60	
Leu	Val	Met	Leu	Leu	Glu	Trp	Trp	Ser	Cys	Thr	Glu	Cys	Thr	Leu	65	70	75	
Phe	Thr	Asp	Gln	Ala	Thr	Val	Glu	Arg	Phe	Gly	Lys	Glu	His	Ala	80	85	90	
Val	Ile	Ile	Leu	Asn	His	Asn	Phe	Glu	Ile	Asp	Phe	Leu	Cys	Gly	95	100	105	
Trp	Thr	Met	Cys	Glu	Arg	Phe	Gly	Val	Leu	Gly	Ser	Ser	Lys	Val	110	115	120	
Leu	Ala	Lys	Lys	Glu	Leu	Leu	Tyr	Val	Pro	Leu	Ile	Gly	Trp	Thr	125	130	135	
Trp	Tyr	Phe	Leu	Glu	Ile	Val	Phe	Cys	Lys	Arg	Lys	Trp	Glu	Glu	140	145	150	
Asp	Arg	Asp	Thr	Val	Val	Glu	Gly	Leu	Arg	Arg	Leu	Ser	Asp	Tyr	155	160	165	
Pro	Glu	Tyr	Met	Trp	Phe	Leu	Leu	Tyr	Cys	Glu	Gly	Thr	Arg	Phe	170	175	180	
Thr	Glu	Thr	Lys	His	Arg	Val	Ser	Met	Glu	Val	Ala	Ala	Ala	Lys	185	190	195	
Gly	Leu	Pro	Val	Leu	Lys	Tyr	His	Leu	Leu	Pro	Arg	Thr	Lys	Gly	200	205	210	
Phe	Thr	Thr	Ala	Val	Lys	Cys	Leu	Arg	Gly	Thr	Val	Ala	Ala	Val	215	220	225	
Tyr	Asp	Val	Thr	Leu	Asn	Phe	Arg	Gly	Asn	Lys	Asn	Pro	Ser	Leu	230	235	240	
Leu	Gly	Ile	Leu	Tyr	Gly	Lys	Lys	Tyr	Glu	Ala	Asp	Met	Cys	Val	245	250	255	
Arg	Arg	Phe	Pro	Leu	Glu	Asp	Ile	Pro	Leu	Asp	Glu	Lys	Glu	Ala				

260	265	270
Ala Gln Trp Leu His Lys Leu Tyr Gln Glu Lys Asp Ala Leu Gln		
275	280	285
Glu Ile Tyr Asn Gln Lys Gly Met Phe Pro Gly Glu Gln Phe Lys		
290	295	300
Pro Ala Arg Arg Pro Trp Thr Leu Leu Asn Phe Leu Ser Trp Ala		
305	310	315
Thr Ile Leu Leu Ser Pro Leu Phe Ser Phe Val Leu Gly Val Phe		
320	325	330
Ala Ser Gly Ser Pro Leu Leu Ile Leu Thr Phe Leu Gly Phe Val		
335	340	345
Gly Ala Ala Ser Phe Gly Val Arg Arg Leu Ile Gly Glu Ser Leu		
350	355	360
Glu Pro Gly Arg Trp Arg Leu Gln		
365		

<210> 339
 <211> 1334
 <212> DNA
 <213> Homo Sapien

<400> 339
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 tcagtttgtc ttgtgggggtt ggtggcaggc aggcgggctt acgcctgata 200
 cggccctggg ttagaagggg agggagata aacttttata caaatgggga 250
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 ttctctctgt tcttaggata aaagtattta gagctacaag agccctcatg 400
 gtctggcccc tgccccctg gccagcttca ttgtacatgt ggtgttctct 450
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 tctttggctg gacactgttc cctgcccccc ccatactctt cctacttaat 550
 atgtagtcat cctgcagatt tcaattctaa catcattttc tccagggatc 600
 ctggcctgac agaattctcat cttgtttaat gctctcataa gaccacttgt 650
 ttcccttttg cagcaattgc cactcagttg tatctttatg tgcgtttgtg 700
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 ggtgctcatg ttttagagac taaatggagg aggagatgag gaaaagattg 850
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 cgttgactgt gcttgtgaat tatctgggga tgcaggtcct gattcagtag 950
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 gtcccagcta cttgggaggc tgaagcaaga gaatcgcttg aacctgggag 1250
 gcggagggtg cagtgaagcc agatcaggcc actgtattcc aaccagggtg 1300
 acagagtgag actctatgtc caaaaaaaaa aaaa 1334

<210> 340

<211> 143

<212> PRT

<213> Homo Sapien

<400> 340

Met His His Ser Leu Gln Cys Pro Gly Ala Ala Thr Arg His Ile
 1 5 10 15

His Leu Cys Val Cys Phe Ser Phe Ala Leu Ala Leu Gly His Phe
 20 25 30

Leu Leu Ile Ser Leu Val Gly Lys Gly Leu Ser Leu Ser Cys Gly
 35 40 45

Val Gly Gly Arg Gln Ala Gly Leu Arg Leu Ile Arg Pro Trp Val
 50 55 60

Arg Arg Glu Gly Lys Ile Asn Phe Tyr Thr Asn Gly Asp Ser Trp
 65 70 75

Gly Leu Arg Pro Ala Ser Ser Val Lys Phe Leu Gly Ser Ala Tyr
 80 85 90

Thr Phe Phe Ser Leu Thr Trp His Thr Leu Leu Lys Ala Ser Gln
 95 100 105

Gly Phe Ser Leu Phe Leu Gly Ser Lys Tyr Leu Glu Leu Gln Glu
 110 115 120

Pro Ser Trp Ser Gly Pro Cys Pro Pro Gly Gln Leu His Cys Thr
 125 130 135

Cys Gly Val Leu Leu Ser Phe Leu

<210> 341
 <211> 783
 <212> DNA
 <213> Homo Sapien

<400> 341
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 tgctggcgtc gacgctgttg gcgctgctcg tgtcgcccgc gcggggtcgc 100
 ggcggccggg accacgggga ctgggacgag gcctcccggc tgccgccgct 150
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 cagcggcgtg ccctatttct acctgagccc gctgcagctc tccgtgagca 350
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 <212> PRT
 <213> Homo Sapien

<400> 342
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 35 40 45
 Leu Pro Pro Leu Pro Pro Arg Glu Asp Ala Ala Arg Val Ala Arg
 50 55 60

Phe Val Thr His Val Ser Asp Trp Gly Ala Leu Ala Thr Ile Ser
65 70 75

Thr Leu Glu Ala Val Arg Gly Arg Pro Phe Ala Asp Val Leu Ser
80 85 90

Leu Ser Asp Gly Pro Pro Gly Ala Gly Ser Gly Val Pro Tyr Phe
95 100 105

Tyr Leu Ser Pro Leu Gln Leu Ser Val Ser Asn Leu Gln Glu Asn
110 115 120

Pro Tyr Ala Thr Leu Thr Met Thr Leu Ala Gln Thr Asn Phe Cys
125 130 135

Lys Lys His Gly Phe Asp Pro Gln Ser Pro Leu Cys Val His Ile
140 145 150

Met Leu Ser Gly Thr Val Thr Lys Val Asn Glu Thr Glu Met Asp
155 160 165

Ile Ala Lys His Ser Leu Phe Ile Arg His Pro Glu Met Lys Thr
170 175 180

Trp Pro Ser Ser His Asn Trp Phe Phe Ala Lys Leu Asn Ile Thr
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Asn Ile Trp Val Leu Asp Tyr Phe Gly Gly Pro Lys Ile Val Thr
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<210> 344
<211> 109
<212> PRT
<213> Homo Sapien
<400> 344
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 Asp Leu Ser Leu Trp Leu Trp Pro Lys Pro Asp Leu His Ser Gly
 35 40 45
 Thr Arg Thr Glu Val Ser Thr His Thr Val Pro Ser Lys Pro Gly
 50 55 60
 Thr Ala Ser Pro Cys Trp Pro Leu Ala Gly Ala Val Pro Ser Pro
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 Thr Val Ser Arg Leu Glu Ala Leu Thr Arg Ala Val Gln Val Ala
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 Glu Pro Leu Gly Ser Cys Gly Phe Gln Gly Gly Pro Cys Pro Gly
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 Arg Arg Arg Asp

<210> 345

<211> 2272

<212> DNA

<213> Homo Sapien

<400> 345

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 <211> 671
 <212> PRT
 <213> Homo Sapien

<400> 346
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 35 40 45
 Gly Thr His Glu Thr Ala Phe Leu Gly Pro Lys Asp Leu Phe Pro
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 Tyr Asp Lys Cys Lys Asp Lys Tyr Gly Lys Pro Asn Lys Arg Lys
 65 70 75
 Gly Phe Asn Glu Gly Leu Trp Glu Ile Gln Asn Asn Pro His Ala
 80 85 90
 Ser Tyr Ser Ala Pro Pro Pro Val Ser Ser Ser Asp Ser Glu Ala
 95 100 105
 Pro Glu Ala Asn Pro Ala Asp Gly Ser Asp Ala Asp Glu Asp Asp
 110 115 120
 Glu Asp Arg Gly Val Met Ala Val Thr Ala Val Thr Ala Thr Ala
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 Ala Ser Asp Arg Met Glu Ser Asp Ser Asp Ser Asp Lys Ser Ser
 140 145 150
 Asp Asn Ser Gly Leu Lys Arg Lys Thr Pro Ala Leu Lys Met Ser
 155 160 165
 Val Ser Lys Arg Ala Arg Lys Ala Ser Ser Asp Leu Asp Gln Ala
 170 175 180
 Ser Val Ser Pro Ser Glu Glu Glu Asn Ser Glu Ser Ser Ser Glu
 185 190 195
 Ser Glu Lys Thr Ser Asp Gln Asp Phe Thr Pro Glu Lys Lys Ala
 200 205 210
 Ala Val Arg Ala Pro Arg Arg Gly Pro Leu Gly Gly Arg Lys Lys
 215 220 225
 Lys Lys Ala Pro Ser Ala Ser Asp Ser Asp Ser Lys Ala Asp Ser

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Asp	Gly	Ala	Lys	Pro 245	Glu	Pro	Val	Ala	Met 250	Ala	Arg	Ser	Ala	Ser 255
Ser	Ser	Ser	Ser	Ser 260	Ser	Ser	Ser	Ser	Asp 265	Ser	Asp	Val	Ser	Val 270
Lys	Lys	Pro	Pro	Arg 275	Gly	Arg	Lys	Pro	Ala 280	Glu	Lys	Pro	Leu	Pro 285
Lys	Pro	Arg	Gly	Arg 290	Lys	Pro	Lys	Pro	Glu 295	Arg	Pro	Pro	Ser	Ser 300
Ser	Ser	Ser	Asp	Ser 305	Asp	Ser	Asp	Glu	Val 310	Asp	Arg	Ile	Ser	Glu 315
Trp	Lys	Arg	Arg	Asp 320	Glu	Ala	Arg	Arg	Arg 325	Glu	Leu	Glu	Ala	Arg 330
Arg	Arg	Arg	Glu	Gln 335	Glu	Glu	Glu	Leu	Arg 340	Arg	Leu	Arg	Glu	Gln 345
Glu	Lys	Glu	Glu	Lys 350	Glu	Arg	Arg	Arg	Glu 355	Arg	Ala	Asp	Arg	Gly 360
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Arg	Gly	Pro	Pro	Ser 395	Ser	Ser	Asp	Ser	Glu 400	Pro	Glu	Ala	Glu	Leu 405
Glu	Arg	Glu	Ala	Lys 410	Lys	Ser	Ala	Lys	Lys 415	Pro	Gln	Ser	Ser	Ser 420
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Pro	Glu	Glu	Lys	Gln 440	Gln	Ala	Lys	Pro	Val 445	Lys	Val	Glu	Arg	Thr 450
Arg	Lys	Arg	Ser	Glu 455	Gly	Phe	Ser	Met	Asp 460	Arg	Lys	Val	Glu	Lys 465
Lys	Lys	Glu	Pro	Ser 470	Val	Glu	Glu	Lys	Leu 475	Gln	Lys	Leu	His	Ser 480
Glu	Ile	Lys	Phe	Ala 485	Leu	Lys	Val	Asp	Ser 490	Pro	Asp	Val	Lys	Arg 495
Cys	Leu	Asn	Ala	Leu 500	Glu	Glu	Leu	Gly	Thr 505	Leu	Gln	Val	Thr	Ser 510
Gln	Ile	Leu	Gln	Lys 515	Asn	Thr	Asp	Val	Val 520	Ala	Thr	Leu	Lys	Lys 525

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Glu Val Tyr Thr Arg Leu Lys Ser Arg Val Leu Gly Pro Lys Ile
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Glu Ala Val Gln Lys Val Asn Lys Ala Gly Met Glu Lys Glu Lys
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Ala Glu Glu Lys Leu Ala Gly Glu Glu Leu Ala Gly Glu Glu Ala
575 580 585

Pro Gln Glu Lys Ala Glu Asp Lys Pro Ser Thr Asp Leu Ser Ala
590 595 600

Pro Val Asn Gly Glu Ala Thr Ser Gln Lys Gly Glu Ser Ala Glu
605 610 615

Asp Lys Glu His Glu Glu Gly Arg Asp Ser Glu Glu Gly Pro Arg
620 625 630

Cys Gly Ser Ser Glu Asp Leu His Asp Ser Val Arg Glu Gly Pro
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<210> 347

<211> 3871

<212> DNA

<213> Homo Sapien

<400> 347

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<210> 348

<211> 777

<212> PRT

<213> Homo Sapien

<400> 348

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Phe	Leu	Pro	Val	Thr	Gly	Thr	Leu	Lys	Gln	Asn	Ile	Pro	Arg	Leu	35	40	45	
Lys	Leu	Thr	Tyr	Lys	Asp	Leu	Leu	Leu	Ser	Asn	Ser	Cys	Ile	Pro	50	55	60	
Phe	Leu	Gly	Ser	Ser	Glu	Gly	Leu	Asp	Phe	Gln	Thr	Leu	Leu	Leu	65	70	75	
Asp	Glu	Glu	Arg	Gly	Arg	Leu	Leu	Leu	Gly	Ala	Lys	Asp	His	Ile	80	85	90	
Phe	Leu	Leu	Ser	Leu	Val	Asp	Leu	Asn	Lys	Asn	Phe	Lys	Lys	Ile	95	100	105	
Tyr	Trp	Pro	Ala	Ala	Lys	Glu	Arg	Val	Glu	Leu	Cys	Lys	Leu	Ala	110	115	120	
Gly	Lys	Asp	Ala	Asn	Thr	Glu	Cys	Ala	Asn	Phe	Ile	Arg	Val	Leu	125	130	135	
Gln	Pro	Tyr	Asn	Lys	Thr	His	Ile	Tyr	Val	Cys	Gly	Thr	Gly	Ala	140	145	150	
Phe	His	Pro	Ile	Cys	Gly	Tyr	Ile	Asp	Leu	Gly	Val	Tyr	Lys	Glu	155	160	165	
Asp	Ile	Ile	Phe	Lys	Leu	Asp	Thr	His	Asn	Leu	Glu	Ser	Gly	Arg				

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Thr Asp Glu Tyr	Leu Tyr Ser Gly Thr	Ala Ser Asp Phe Leu	Gly		
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Lys Asp Thr Ala	Phe Thr Arg Ser Leu	Gly Pro Thr His Asp	His		
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His Tyr Ile Arg	Thr Asp Ile Ser Glu	His Tyr Trp Leu Asn	Gly		
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Ala Lys Phe Ile	Gly Thr Phe Phe Ile	Pro Asp Thr Tyr Asn	Pro		
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Asp Asp Asp Lys	Ile Tyr Phe Phe Phe	Arg Glu Ser Ser Gln	Glu		
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Gly Ser Thr Ser	Asp Lys Thr Ile Leu	Ser Arg Val Gly Arg	Val		
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Cys Lys Asn Asp	Val Gly Gly Gln Arg	Ser Leu Ile Asn Lys	Trp		
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Asp Gly Ala Asp	Thr Tyr Phe Asp Glu	Leu Gln Asp Ile Tyr	Leu		
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Leu Pro Thr Arg	Asp Glu Arg Asn Pro	Val Val Tyr Gly Val	Phe		
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Thr Thr Thr Ser	Ser Ile Phe Lys Gly	Ser Ala Val Cys Val	Tyr		
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Ser Met Ala Asp	Ile Arg Ala Val Phe	Asn Gly Pro Tyr Ala	His		
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Lys Glu Ser Ala	Asp His Arg Trp Val	Gln Tyr Asp Gly Arg	Ile		
	380		385		390
Pro Tyr Pro Arg	Pro Gly Thr Cys Pro	Ser Lys Thr Tyr Asp	Pro		
	395		400		405
Leu Ile Lys Ser	Thr Arg Asp Phe Pro	Asp Asp Val Ile Ser	Phe		
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Ile Lys Arg His	Ser Val Met Tyr Lys	Ser Val Tyr Pro Val	Ala		
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Gly Gly Pro Thr	Phe Lys Arg Ile Asn	Val Asp Tyr Arg Leu	Thr		
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Gln Ile Val Val	Asp His Val Ile Ala	Glu Asp Gly Gln Tyr	Asp		
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760

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<211> 3934

<212> DNA

<213> Homo Sapien

<400> 349

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Met	Gln	Leu	Ala	Lys	Tyr	Gln	Ser	His	Ser	Lys	Ser	Cys	Pro	Thr	1	5	10	15
Val	Phe	Pro	Pro	Thr	Pro	Val	Leu	Cys	Leu	Pro	Asn	Gln	Val	Leu	20	25	30	
Gln	Arg	Leu	Glu	Gln	Arg	Arg	Gln	Gln	Ala	Ser	Glu	Arg	Glu	Ala	35	40	45	
Pro	Ser	Ile	Glu	Gln	Arg	Leu	Gln	Glu	Val	Arg	Glu	Ser	Ile	Arg	50	55	60	
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Glu	Leu	Leu	Gly	Pro	Pro	Gly	Pro	Pro	Glu	Leu	Ser	Asp	Pro	Glu				

	290		295		300
Gln Met Leu Pro Ser Pro Ser Pro Pro Ser Phe Ser Pro Pro Ala					
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Pro Thr Ser Val Leu Asp Gly Pro Pro Ala Pro Val Leu Pro Gly					
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Asp Lys Ala Leu Asp Phe Pro Gly Phe Leu Asp Met Met Ala Pro					
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<211> 4407

<212> DNA

<213> Homo Sapien

<400> 351

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<211> 837
<212> PRT
<213> Homo Sapien

<400> 352
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Ile Val Phe Pro Glu Lys Leu Asn Gly Ser Val Leu Pro Gly Ser
65 70 75
Gly Ala Pro Ala Arg Leu Leu Cys Arg Leu Gln Ala Phe Gly Glu
80 85 90
Thr Leu Leu Leu Glu Leu Glu Gln Asp Ser Gly Val Gln Val Glu
95 100 105
Gly Leu Thr Val Gln Tyr Leu Gly Gln Ala Pro Glu Leu Leu Gly
110 115 120
Gly Ala Glu Pro Gly Thr Tyr Leu Thr Gly Thr Ile Asn Gly Asp
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Gly	Val	Leu	Gln	Tyr	Arg	Gly	Ala	Glu	Leu	His	Leu	Gln	Pro	Leu	155	160	165
Glu	Gly	Gly	Thr	Pro	Asn	Ser	Ala	Gly	Gly	Pro	Gly	Ala	His	Ile	170	175	180
Leu	Arg	Arg	Lys	Ser	Pro	Ala	Ser	Gly	Gln	Gly	Pro	Met	Cys	Asn	185	190	195
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Pro	Cys	Ser	Ala	Arg	Phe	Ile	Thr	Asp	Phe	Leu	Asp	Asn	Gly	Tyr	410	415	420
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Tyr Ala Leu Asn Gly Glu Tyr Thr Leu Met Pro Ser Pro Thr Asp
740 745 750

Val Val Leu Pro Gly Ala Val Ser Leu Arg Tyr Ser Gly Ala Thr
755 760 765

Ala Ala Ser Glu Thr Leu Ser Gly His Gly Pro Leu Ala Gln Pro
770 775 780

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785 790 795

Leu Arg Tyr Ser Phe Phe Val Pro Arg Pro Thr Pro Ser Thr Pro
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Glu Ile Leu Arg Arg Arg Pro Trp Ala Gly Arg Lys
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<210> 353

<211> 1174

<212> DNA

<213> Homo Sapien

<400> 353

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Ala	Pro	Pro	Arg	Ala	Thr	Thr	Thr	Thr	Ala	Asn	Thr	Ala	Pro	Ala
				200					205					210
Tyr	Gln	Pro	Pro	Ala	Ala	Tyr	Lys	Asp	Asn	Arg	Ala	Pro	Ser	Val
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<211> 2121

<212> DNA

<213> Homo Sapien

<400> 355

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Thr Glu Cys Arg Pro Tyr Phe Thr Ile Leu Gly Leu Pro Ala Met	65		70		75
Leu Gln Ala Val Arg Ala Leu Met Ile Val Gly Ile Val Leu Gly	80		85		90
Ala Ile Gly Leu Leu Val Ser Ile Phe Ala Leu Lys Cys Ile Arg	95		100		105
Ile Gly Ser Met Glu Asp Ser Ala Lys Ala Asn Met Thr Leu Thr	110		115		120
Ser Gly Ile Met Phe Ile Val Ser Gly Leu Cys Ala Ile Ala Gly	125		130		135
Val Ser Val Phe Ala Asn Met Leu Val Thr Asn Phe Trp Met Ser	140		145		150
Thr Ala Asn Met Tyr Thr Gly Met Gly Gly Met Val Gln Thr Val	155		160		165
Gln Thr Arg Tyr Thr Phe Gly Ala Ala Leu Phe Val Gly Trp Val	170		175		180
Ala Gly Gly Leu Thr Leu Ile Gly Gly Val Met Met Cys Ile Ala	185		190		195
Cys Arg Gly Leu Ala Pro Glu Glu Thr Asn Tyr Lys Ala Val Ser	200		205		210
Tyr His Ala Ser Gly His Ser Val Ala Tyr Lys Pro Gly Gly Phe	215		220		225
Lys Ala Ser Thr Gly Phe Gly Ser Asn Thr Lys Asn Lys Lys Ile	230		235		240
Tyr Asp Gly Gly Ala Arg Thr Glu Asp Glu Val Gln Ser Tyr Pro	245		250		255
Ser Lys His Asp Tyr Val	260				

<210> 357

<211> 2010

<212> DNA

<213> Homo Sapien

<400> 357

ggaaaaactg ttctcttctg tggcacagag aaccctgctt caaagcagaa 50

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 caacccatgc cttagaaatc gctgggctgt ttcttggtgg tgttggaatg 150
 gtgggcacag tggtgtcac tgtcatgcct cagtggagag tgcggcctt 200
 cattgaaaac aacatcgtgg tttttgaaaa cttctgggaa ggactgtgga 250
 tgaattgcgt gaggcaggct aacatcagga tgcagtgcaa aatctatgat 300
 tccctgctgg ctctttctcc ggacctacag gcagccagag gactgatgtg 350
 tgetgcttcc gtgatgtcct tcttggtttt catgatggcc atccttggca 400
 tgaaatgcac caggtgcacg ggggacaatg agaaggtgaa ggctcacatt 450
 ctgtgacgg ctggaatcat cttcatcatc acgggcatgg tgggtgctcat 500
 ccctgtgagc tgggttgcca atgccatcat cagagatttc tataactcaa 550
 tagtgaatgt tgcccaaaaa cgtgagcttg gagaagctct ctacttagga 600
 tggaccacgg cactggtgct gattgttggg ggagctctgt tctgctgcgt 650
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 actgtgcac agctatttat gattctataa gctatttcag cagaatgaga 950
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 taagggtggt caagcatcta ctctttttat catttacttc aaaatgacat 1050
 tgctaaagac tgcattatct tactactgta atttctccac gacatagcat 1100
 tatgtacata gatgagtgtg acatttatat ctcacataga gacatgctta 1150
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 actcaactat tgctttttcag ggaaatcatg gatagggttg aagaaggtta 1250
 ctattaattg tttaaaaaca gcttagggat taatgtcctc catttataat 1300
 gaagattaaa atgaaggctt taatcagcat tgtaaaggaa attgaatggc 1350
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 ttttactaaa atctgtaaata actgtatttt tctgtttatt ccaaatttga 1900
 tgaaactgac aatccaattt gaaagtttgt gtcgacgtct gtctagctta 1950
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 tttttctaatt 2010

<210> 358
 <211> 225
 <212> PRT
 <213> Homo Sapien

<400> 358
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 Val Gly Met Val Gly Thr Val Ala Val Thr Val Met Pro Gln Trp
 20 25 30
 Arg Val Ser Ala Phe Ile Glu Asn Asn Ile Val Val Phe Glu Asn
 35 40 45
 Phe Trp Glu Gly Leu Trp Met Asn Cys Val Arg Gln Ala Asn Ile
 50 55 60
 Arg Met Gln Cys Lys Ile Tyr Asp Ser Leu Leu Ala Leu Ser Pro
 65 70 75
 Asp Leu Gln Ala Ala Arg Gly Leu Met Cys Ala Ala Ser Val Met
 80 85 90
 Ser Phe Leu Ala Phe Met Met Ala Ile Leu Gly Met Lys Cys Thr
 95 100 105
 Arg Cys Thr Gly Asp Asn Glu Lys Val Lys Ala His Ile Leu Leu
 110 115 120
 Thr Ala Gly Ile Ile Phe Ile Ile Thr Gly Met Val Val Leu Ile
 125 130 135
 Pro Val Ser Trp Val Ala Asn Ala Ile Ile Arg Asp Phe Tyr Asn
 140 145 150

Ser	Ile	Val	Asn	Val	Ala	Gln	Lys	Arg	Glu	Leu	Gly	Glu	Ala	Leu
			155						160					165
Tyr	Leu	Gly	Trp	Thr	Thr	Ala	Leu	Val	Leu	Ile	Val	Gly	Gly	Ala
			170						175					180
Leu	Phe	Cys	Cys	Val	Phe	Cys	Cys	Asn	Glu	Lys	Ser	Ser	Ser	Tyr
			185						190					195
Arg	Tyr	Ser	Ile	Pro	Ser	His	Arg	Thr	Thr	Gln	Lys	Ser	Tyr	His
			200						205					210
Thr	Gly	Lys	Lys	Ser	Pro	Ser	Val	Tyr	Ser	Arg	Ser	Gln	Tyr	Val
			215						220					225

<210> 359
 <211> 742
 <212> DNA
 <213> Homo Sapien

<400> 359
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 tggccctgac cgggctggcg ctgctcctgc tctgtgctg gggcccaggt 150
 ggcataagtg gaaataaact caagctgatg cttcaaaaac gagaagcacc 200
 tgttccaact aagactaaag tggccgttga tgagaataaa gccaaagaat 250
 tccttggcag cctgaagcgc cagaagcggc agctgtggga ccggactcgg 300
 cccgaggtgc agcagtggta ccagcagttt ctctacatgg gctttgatga 350
 agcgaaattt gaagatgaca tcacctattg gcttaacaga gatcgaaatg 400
 gacatgaata ctatggcgat tactaccaac gtcactatga tgaagactct 450
 gcaattggtc cccggagccc ctacggcttt aggcattggag ccagcgtcaa 500
 ctacgatgac tactaaccat gacttgccac acgctgtaca agaagcaaatt 550
 agcgattctc ttcattgtat tctaattgcc ttacactact tggttttctga 600
 tttgctctat ttcagcagat cttttctacc tactttgtgt gatcaaaaaa 650
 gaagagttaa aacaacacat gtaaattgcct tttgatattt catgggaatg 700
 cctctcattt aaaaatagaa ataaagcatt ttgttaaaaa ga 742

<210> 360
 <211> 148
 <212> PRT
 <213> Homo Sapien

<400> 360
 Met Ala Ala Ser Pro Ala Arg Pro Ala Val Leu Ala Leu Thr Gly

1	5	10	15
Leu Ala Leu Leu Leu Leu Cys Trp Gly Pro Gly Gly Ile Ser	20	25	30
Gly Asn Lys Leu Lys Leu Met Leu Gln Lys Arg Glu Ala Pro Val	35	40	45
Pro Thr Lys Thr Lys Val Ala Val Asp Glu Asn Lys Ala Lys Glu	50	55	60
Phe Leu Gly Ser Leu Lys Arg Gln Lys Arg Gln Leu Trp Asp Arg	65	70	75
Thr Arg Pro Glu Val Gln Gln Trp Tyr Gln Gln Phe Leu Tyr Met	80	85	90
Gly Phe Asp Glu Ala Lys Phe Glu Asp Asp Ile Thr Tyr Trp Leu	95	100	105
Asn Arg Asp Arg Asn Gly His Glu Tyr Tyr Gly Asp Tyr Tyr Gln	110	115	120
Arg His Tyr Asp Glu Asp Ser Ala Ile Gly Pro Arg Ser Pro Tyr	125	130	135
Gly Phe Arg His Gly Ala Ser Val Asn Tyr Asp Asp Tyr	140	145	

<210> 361
 <211> 849
 <212> DNA
 <213> Homo Sapien

<400> 361
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 atgacaaagg cgctactcat ctatttggtc agcagctttc ttgccctaaa 200
 tcaggccagc ctcactcagtc gctgtgactt ggcccaggtg ctgcagctgg 250
 aggacttggg tgggtttgag ggttactccc tgagtgactg gctgtgcctg 300
 gcttttgtgg aaagcaagtt caacatatca aagataaatg aaaatgcgga 350
 tggaagcttt gactatggcc tcttcagat caacagccac tactggtgca 400
 acgattataa gagttactcg gaaaaccttt gccacgtaga ctgtcaagat 450
 ctgctgaatc ccaaccttct tgcaggcatc cactgcgcaa aaaggattgt 500
 gtccggagca cgggggatga acaactgggt agaattggagg ttgcactgtt 550
 caggccggcc actctctac tggctgacag gatgccgcct gagatgaaac 600

aaggagaaaa ccggggtaaa gggaggggaag caattcaatt tgaagtcct 200
gtgaatgggc tttcagaagg caattaaaga aatccactca gagaggactt 250
ggggtgaaac ttgggtcctg tggttttctg attgtaagtg gaagcaggtc 300
ttgcacacgc tgttggcaaa tgtcaggacc aggttaagtg actggcagaa 350
aaacttccag gtggaacaag caacccatgt tctgctgcaa gcttgaagga 400
gcctggagcg ggagaaagct aacttgaaca tgacctgttg catttgga 450
gttctagcaa catgctccta aggaagcgat acaggcacag accatgcaga 500
ctccagttcc tctgctgct cctgatgctg ggatgcgtcc tgatgatggt 550
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aagccagcaa gcacagccct gaagccaggt accgcctgga ctttggggaa 650
tcccaggatt gggactgga agctgaggat gagggggaag agtacagccc 700
tctggagggc ctgccaccct ttatctcact gcgggaggat cagctgctgg 750
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cccaaagagg gactgggggg ctgatgagga cggggagggtg tctgaagaag 900
aggagttgac cccgttcagc ctggaccac gtggcctcca ggaggcactc 950
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gtgtctgcag cagcaccctc aggacagcct gccacagcc agcgtcatcc 1050
tctgtttcca tgatgaggcc tggctcactc tctgcggac tgtacacagc 1100
atcctcgaca cagtgccag ggcttctctg aaggagatca tctcgtgga 1150
cgacctcagc cagcaaggac aactcaagtc tgctctcagc gaatatgtgg 1200
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gtgattgact ggaagacttt ccagtattac ccctcaaagg acctgcagcg 1450
tgggggtgttg gactggaagc tggatttcca ctgggaacct ttgccagagc 1500
atgtgaggaa ggccctccag tccccataa gcccatcag gagccctgtg 1550
gtgcccggag aggtgggtggc catggacaga cattacttcc aaaacactgg 1600

Phe	Gly	Glu	Ser	Gln 65	Asp	Trp	Val	Leu	Glu 70	Ala	Glu	Asp	Glu	Gly 75
Glu	Glu	Tyr	Ser	Pro 80	Leu	Glu	Gly	Leu	Pro 85	Pro	Phe	Ile	Ser	Leu 90
Arg	Glu	Asp	Gln	Leu 95	Leu	Val	Ala	Val	Ala 100	Leu	Pro	Gln	Ala	Arg 105
Arg	Asn	Gln	Ser	Gln 110	Gly	Arg	Arg	Gly	Gly 115	Ser	Tyr	Arg	Leu	Ile 120
Lys	Gln	Pro	Arg	Arg 125	Gln	Asp	Lys	Glu	Ala 130	Pro	Lys	Arg	Asp	Trp 135
Gly	Ala	Asp	Glu	Asp 140	Gly	Glu	Val	Ser	Glu 145	Glu	Glu	Glu	Leu	Thr 150
Pro	Phe	Ser	Leu	Asp 155	Pro	Arg	Gly	Leu	Gln 160	Glu	Ala	Leu	Ser	Ala 165
Arg	Ile	Pro	Leu	Gln 170	Arg	Ala	Leu	Pro	Glu 175	Val	Arg	His	Pro	Leu 180
Cys	Leu	Gln	Gln	His 185	Pro	Gln	Asp	Ser	Leu 190	Pro	Thr	Ala	Ser	Val 195
Ile	Leu	Cys	Phe	His 200	Asp	Glu	Ala	Trp	Ser 205	Thr	Leu	Leu	Arg	Thr 210
Val	His	Ser	Ile	Leu 215	Asp	Thr	Val	Pro	Arg 220	Ala	Phe	Leu	Lys	Glu 225
Ile	Ile	Leu	Val	Asp 230	Asp	Leu	Ser	Gln	Gln 235	Gly	Gln	Leu	Lys	Ser 240
Ala	Leu	Ser	Glu	Tyr 245	Val	Ala	Arg	Leu	Glu 250	Gly	Val	Lys	Leu	Leu 255
Arg	Ser	Asn	Lys	Arg 260	Leu	Gly	Ala	Ile	Arg 265	Ala	Arg	Met	Leu	Gly 270
Ala	Thr	Arg	Ala	Thr 275	Gly	Asp	Val	Leu	Val 280	Phe	Met	Asp	Ala	His 285
Cys	Glu	Cys	His	Pro 290	Gly	Trp	Leu	Glu	Pro 295	Leu	Leu	Ser	Arg	Ile 300
Ala	Gly	Asp	Arg	Ser 305	Arg	Val	Val	Ser	Pro 310	Val	Ile	Asp	Val	Ile 315
Asp	Trp	Lys	Thr	Phe 320	Gln	Tyr	Tyr	Pro	Ser 325	Lys	Asp	Leu	Gln	Arg 330
Gly	Val	Leu	Asp	Trp 335	Lys	Leu	Asp	Phe	His 340	Trp	Glu	Pro	Leu	Pro 345
Glu	His	Val	Arg	Lys	Ala	Leu	Gln	Ser	Pro	Ile	Ser	Pro	Ile	Arg

				350					355					360
Ser	Pro	Val	Val	Pro 365	Gly	Glu	Val	Val	Ala 370	Met	Asp	Arg	His	Tyr 375
Phe	Gln	Asn	Thr	Gly 380	Ala	Tyr	Asp	Ser	Leu 385	Met	Ser	Leu	Arg	Gly 390
Gly	Glu	Asn	Leu	Glu 395	Leu	Ser	Phe	Lys	Ala 400	Trp	Leu	Cys	Gly	Gly 405
Ser	Val	Glu	Ile	Leu 410	Pro	Cys	Ser	Arg	Val 415	Gly	His	Ile	Tyr	Gln 420
Asn	Gln	Asp	Ser	His 425	Ser	Pro	Leu	Asp	Gln 430	Glu	Ala	Thr	Leu	Arg 435
Asn	Arg	Val	Arg	Ile 440	Ala	Glu	Thr	Trp	Leu 445	Gly	Ser	Phe	Lys	Glu 450
Thr	Phe	Tyr	Lys	His 455	Ser	Pro	Glu	Ala	Phe 460	Ser	Leu	Ser	Lys	Ala 465
Glu	Lys	Pro	Asp	Cys 470	Met	Glu	Arg	Leu	Gln 475	Leu	Gln	Arg	Arg	Leu 480
Gly	Cys	Arg	Thr	Phe 485	His	Trp	Phe	Leu	Ala 490	Asn	Val	Tyr	Pro	Glu 495
Leu	Tyr	Pro	Ser	Glu 500	Pro	Arg	Pro	Ser	Phe 505	Ser	Gly	Lys	Leu	His 510
Asn	Thr	Gly	Leu	Gly 515	Leu	Cys	Ala	Asp	Cys 520	Gln	Ala	Glu	Gly	Asp 525
Ile	Leu	Gly	Cys	Pro 530	Met	Val	Leu	Ala	Pro 535	Cys	Ser	Asp	Ser	Arg 540
Gln	Gln	Gln	Tyr	Leu 545	Gln	His	Thr	Ser	Arg 550	Lys	Glu	Ile	His	Phe 555
Gly	Ser	Pro	Gln	His 560	Leu	Cys	Phe	Ala	Val 565	Arg	Gln	Glu	Gln	Val 570
Ile	Leu	Gln	Asn	Cys 575	Thr	Glu	Glu	Gly	Leu 580	Ala	Ile	His	Gln	Gln 585
His	Trp	Asp	Phe	Gln 590	Glu	Asn	Gly	Met	Ile 595	Val	His	Ile	Leu	Ser 600
Gly	Lys	Cys	Met	Glu 605	Ala	Val	Val	Gln	Glu 610	Asn	Asn	Lys	Asp	Leu 615
Tyr	Leu	Arg	Pro	Cys 620	Asp	Gly	Lys	Ala	Arg 625	Gln	Gln	Trp	Arg	Phe 630
Asp	Gln	Ile	Asn	Ala 635	Val	Asp	Glu	Arg						

<210> 365
 <211> 1257
 <212> DNA
 <213> Homo Sapien

<400> 365
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 ccgcctccag ctccgcgctg cccggcagcc gggagccatg cgaccccagg 150
 gccccgcgcg cccccgcag cggctccgcg gcctcctgct gctcctgctg 200
 ctgcagctgc ccgcgccgtc gagcgccctc gagatcccca aggggaagca 250
 aaaggcgcag ctccggcaga gggagggtgt ggacctgtat aatggaatgt 300
 gcttacaagg gccagcagga gtgcctggtc gagacgggag ccctggggcc 350
 aatgtttattc cgggtacacc tgggatccca ggtcgggatg gattcaaagg 400
 agaaaagggg gaatgtctga gggaaagctt tgaggagtcc tggacacca 450
 actacaagca gtgttcattg agttcattga attatggcat agatcttggg 500
 aaaattgcgg agtgtacatt tacaaagatg cgttcaaata gtgctctaag 550
 agttttgttc agtggctcac ttcggctaaa atgcagaaat gcatgctgtc 600
 agcgttggtta tttcacattc aatggagctg aatgttcagg acctcttccc 650
 attgaagcta taatttatct ggaccaagga agccctgaaa tgaattcaac 700
 aattaatatt catcgactt cttctgtgga aggactttgt gaaggaattg 750
 gtgctggatt agtggatgtt gctatctggg ttggcacttg ttcagattac 800
 ccaaaaggag atgcttctac tggatggaat tcagtttctc gcatcattat 850
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 gtatacatct gaatgaaaag caaagctaaa tatgtttaca gaccaaagtg 1000
 tgatttcaca ctgtttttta atctagcatt attcattttg cttcaatcaa 1050
 aagtggtttc aatatttttt ttagttggtt agaatacttt cttcatagtc 1100
 acattctctc aacctataat ttggaatatt gttgtggtct tttgtttttt 1150
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 aatttgtaaa tgttaagaat tttttttata tctgttaaat aaaaattatt 1250
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<210> 366
 <211> 243
 <212> PRT
 <213> Homo Sapien

<400> 366

Met	Arg	Pro	Gln	Gly	Pro	Ala	Ala	Ser	Pro	Gln	Arg	Leu	Arg	Gly	1	5	10	15
Leu	Leu	Leu	Leu	Leu	Leu	Leu	Gln	Leu	Pro	Ala	Pro	Ser	Ser	Ala	20	25	30	
Ser	Glu	Ile	Pro	Lys	Gly	Lys	Gln	Lys	Ala	Gln	Leu	Arg	Gln	Arg	35	40	45	
Glu	Val	Val	Asp	Leu	Tyr	Asn	Gly	Met	Cys	Leu	Gln	Gly	Pro	Ala	50	55	60	
Gly	Val	Pro	Gly	Arg	Asp	Gly	Ser	Pro	Gly	Ala	Asn	Val	Ile	Pro	65	70	75	
Gly	Thr	Pro	Gly	Ile	Pro	Gly	Arg	Asp	Gly	Phe	Lys	Gly	Glu	Lys	80	85	90	
Gly	Glu	Cys	Leu	Arg	Glu	Ser	Phe	Glu	Glu	Ser	Trp	Thr	Pro	Asn	95	100	105	
Tyr	Lys	Gln	Cys	Ser	Trp	Ser	Ser	Leu	Asn	Tyr	Gly	Ile	Asp	Leu	110	115	120	
Gly	Lys	Ile	Ala	Glu	Cys	Thr	Phe	Thr	Lys	Met	Arg	Ser	Asn	Ser	125	130	135	
Ala	Leu	Arg	Val	Leu	Phe	Ser	Gly	Ser	Leu	Arg	Leu	Lys	Cys	Arg	140	145	150	
Asn	Ala	Cys	Cys	Gln	Arg	Trp	Tyr	Phe	Thr	Phe	Asn	Gly	Ala	Glu	155	160	165	
Cys	Ser	Gly	Pro	Leu	Pro	Ile	Glu	Ala	Ile	Ile	Tyr	Leu	Asp	Gln	170	175	180	
Gly	Ser	Pro	Glu	Met	Asn	Ser	Thr	Ile	Asn	Ile	His	Arg	Thr	Ser	185	190	195	
Ser	Val	Glu	Gly	Leu	Cys	Glu	Gly	Ile	Gly	Ala	Gly	Leu	Val	Asp	200	205	210	
Val	Ala	Ile	Trp	Val	Gly	Thr	Cys	Ser	Asp	Tyr	Pro	Lys	Gly	Asp	215	220	225	
Ala	Ser	Thr	Gly	Trp	Asn	Ser	Val	Ser	Arg	Ile	Ile	Ile	Glu	Glu	230	235	240	
Leu	Pro	Lys																

<210> 367

<211> 480
 <212> DNA
 <213> Homo Sapien

<400> 367
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 cggccaggat ggcatactgt ctggccctgc gcatggcgct gctgctggtc 100
 tccgggggttc tggccccctgc ggtgctcaca gacgatgttc cacaggagcc 150
 cgtgcccacg ctgtggaacg agccggccga gctgccgctg ggagaaggcc 200
 ccgtggagag caccagcccc ggccgggagc ccgtggacac cggcccccca 250
 gccccaccg tcgcgccagg acccgaggac agcaccgcgc aggagcggct 300
 ggaccagggc ggcgggtcgc tggggccccg cgctatcgcg gccatcgtga 350
 tcgccgccct gctggccacc tgcgtggtgc tggcgctcgt ggtcgtcgcg 400
 ctgagaaaagt tttctgcctc ctgaagcgaa taaagggggc gcgccgggcc 450
 gcggcgcgac tcggcaaaaa aaaaaaaaaa 480

<210> 368
 <211> 121
 <212> PRT
 <213> Homo Sapien

<400> 368
 Met Ala Ser Cys Leu Ala Leu Arg Met Ala Leu Leu Leu Val Ser
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 Gly Val Leu Ala Pro Ala Val Leu Thr Asp Asp Val Pro Gln Glu
 20 25 30
 Pro Val Pro Thr Leu Trp Asn Glu Pro Ala Glu Leu Pro Ser Gly
 35 40 45
 Glu Gly Pro Val Glu Ser Thr Ser Pro Gly Arg Glu Pro Val Asp
 50 55 60
 Thr Gly Pro Pro Ala Pro Thr Val Ala Pro Gly Pro Glu Asp Ser
 65 70 75
 Thr Ala Gln Glu Arg Leu Asp Gln Gly Gly Gly Ser Leu Gly Pro
 80 85 90
 Gly Ala Ile Ala Ala Ile Val Ile Ala Ala Leu Leu Ala Thr Cys
 95 100 105
 Val Val Leu Ala Leu Val Val Val Ala Leu Arg Lys Phe Ser Ala
 110 115 120
 Ser

<210> 369
<211> 2134
<212> DNA
<213> Homo Sapien

<400> 369
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gtgctgacg gcggcgctgg cccacggctg tctgcactgc cacagcaact 150
tctccaagaa gttctccttc taccgccacc atgtgaactt caagtccctg 200
tggtggggcg acatccccgt gtcagggggc ctgctcaccg actggagcga 250
cgacacgatg aaggagctgc acctggccat ccccgccaag atcacccggg 300
agaagctgga ccaagtggcg acagcagtgt accagatgat ggatcagctg 350
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catcttcagg gagcaggtgc acctcatcca gaacgccatc atcgaaaggc 450
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gtaagtcccc tcctcaaacc aacacaggca gtgtgtgtat gtgagcacct 1050
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<210> 370
<211> 157
<212> PRT
<213> Homo Sapien

<400> 370
Met Ala Leu Leu Leu Cys Leu Val Cys Leu Thr Ala Ala Leu Ala
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His Gly Cys Leu His Cys His Ser Asn Phe Ser Lys Lys Phe Ser
20 25 30
Phe Tyr Arg His His Val Asn Phe Lys Ser Trp Trp Val Gly Asp
35 40 45
Ile Pro Val Ser Gly Ala Leu Leu Thr Asp Trp Ser Asp Asp Thr
50 55 60
Met Lys Glu Leu His Leu Ala Ile Pro Ala Lys Ile Thr Arg Glu
65 70 75
Lys Leu Asp Gln Val Ala Thr Ala Val Tyr Gln Met Met Asp Gln
80 85 90

Leu Tyr Gln Gly Lys Met Tyr Phe Pro Gly Tyr Phe Pro Asn Glu
95 100 105

Leu Arg Asn Ile Phe Arg Glu Gln Val His Leu Ile Gln Asn Ala
110 115 120

Ile Ile Glu Arg His Leu Ala Pro Gly Ser Trp Gly Gly Gly Gln
125 130 135

Leu Ser Arg Glu Gly Pro Ser Leu Ala Pro Glu Gly Ser Met Pro
140 145 150

Ser Pro Arg Gly Asp Leu Pro
155

<210> 371
<211> 1321
<212> DNA
<213> Homo Sapien

<400> 371
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ccatcagcgc gccgggctgc cgcctctcgg ccacggctgg gtcggggggc 150
tcgggctggg gctggggctg gcgctcgggg tgaagctggc aggtgggctg 200
aggggcgcgg ccccggcgca gtccccgcg gcccccgacc ctgaggcgtc 250
gcctctggcc gagccgccac aggagcagtc cctcgccccg tgggtctccgc 300
agacccccgc gccgccctgc tccagggtgt tcgccagagc catcgagagc 350
agccgcgacc tgctgcacag gatcaaggat gaggtgggcg caccgggcat 400
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gttatgtcta tgttgagaac cgtgtaccat gtaaaccaga gacagttatg 500
cgaattgcta gcatcagcaa aagtctcacc atgggttgctc ttgccaaatt 550
gtgggaagca gggaaactgg atcttgatat tccagtacaa cattatgttc 600
ccgaattccc agaaaaagaa tatgaagggtg aaaagggttc tgtcacaaca 650
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aaaaaagggtg aaagaagaga aagcttataa agccttgaag atgatgaaag 750
agaatgttgc atttgagcaa gaaaaagaag gcaaaagtaa tgaaaagaat 800
gattttacta aatttaaaac agagcaggag aatgaagcca aatgccggaa 850
ttcaaaacct ggcaagaaaa agaattgattt tgaacaaggc gaattatatt 900
tgagagaaaa gtttgaaaat tcaattgaat ccctaagatt atttaaaaat 950

gatcctttgt tcttcaaacc tggtagtcag tttttgtatt caacttttgg 1000
ctatacccta ctggcagcca tagtagagag agcttcagga tgtaaattatt 1050
tggtactatat gcagaaaata ttccatgact tggatatgct gacgactgtg 1100
caggaagaaa acgagccagt gattttacaat agagcaaggt aaatgaatac 1150
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aagtcaaatt ttctttgttt ccattccaaa atcaacctgc cacattttgg 1250
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catgtttata aagtaaaaaa a 1321

<210> 372

<211> 373

<212> PRT

<213> Homo Sapien

<400> 372

Met	Tyr	Arg	Leu	Leu	Ser	Ala	Val	Thr	Ala	Arg	Ala	Ala	Ala	Pro	1	5	10	15
Gly	Gly	Leu	Ala	Ser	Ser	Cys	Gly	Arg	Arg	Gly	Val	His	Gln	Arg	20	25	30	
Ala	Gly	Leu	Pro	Pro	Leu	Gly	His	Gly	Trp	Val	Gly	Gly	Leu	Gly	35	40	45	
Leu	Gly	Leu	Gly	Leu	Ala	Leu	Gly	Val	Lys	Leu	Ala	Gly	Gly	Leu	50	55	60	
Arg	Gly	Ala	Ala	Pro	Ala	Gln	Ser	Pro	Ala	Ala	Pro	Asp	Pro	Glu	65	70	75	
Ala	Ser	Pro	Leu	Ala	Glu	Pro	Pro	Gln	Glu	Gln	Ser	Leu	Ala	Pro	80	85	90	
Trp	Ser	Pro	Gln	Thr	Pro	Ala	Pro	Pro	Cys	Ser	Arg	Cys	Phe	Ala	95	100	105	
Arg	Ala	Ile	Glu	Ser	Ser	Arg	Asp	Leu	Leu	His	Arg	Ile	Lys	Asp	110	115	120	
Glu	Val	Gly	Ala	Pro	Gly	Ile	Val	Val	Gly	Val	Ser	Val	Asp	Gly	125	130	135	
Lys	Glu	Val	Trp	Ser	Glu	Gly	Leu	Gly	Tyr	Ala	Asp	Val	Glu	Asn	140	145	150	
Arg	Val	Pro	Cys	Lys	Pro	Glu	Thr	Val	Met	Arg	Ile	Ala	Ser	Ile	155	160	165	
Ser	Lys	Ser	Leu	Thr	Met	Val	Ala	Leu	Ala	Lys	Leu	Trp	Glu	Ala	170	175	180	

Gly	Lys	Leu	Asp	Leu	Asp	Ile	Pro	Val	Gln	His	Tyr	Val	Pro	Glu	
				185					190					195	
Phe	Pro	Glu	Lys	Glu	Tyr	Glu	Gly	Glu	Lys	Val	Ser	Val	Thr	Thr	
				200					205					210	
Arg	Leu	Leu	Ile	Ser	His	Leu	Ser	Gly	Ile	Arg	His	Tyr	Glu	Lys	
				215					220					225	
Asp	Ile	Lys	Lys	Val	Lys	Glu	Glu	Lys	Ala	Tyr	Lys	Ala	Leu	Lys	
				230					235					240	
Met	Met	Lys	Glu	Asn	Val	Ala	Phe	Glu	Gln	Glu	Lys	Glu	Gly	Lys	
				245					250					255	
Ser	Asn	Glu	Lys	Asn	Asp	Phe	Thr	Lys	Phe	Lys	Thr	Glu	Gln	Glu	
				260					265					270	
Asn	Glu	Ala	Lys	Cys	Arg	Asn	Ser	Lys	Pro	Gly	Lys	Lys	Lys	Asn	
				275					280					285	
Asp	Phe	Glu	Gln	Gly	Glu	Leu	Tyr	Leu	Arg	Glu	Lys	Phe	Glu	Asn	
				290					295					300	
Ser	Ile	Glu	Ser	Leu	Arg	Leu	Phe	Lys	Asn	Asp	Pro	Leu	Phe	Phe	
				305					310					315	
Lys	Pro	Gly	Ser	Gln	Phe	Leu	Tyr	Ser	Thr	Phe	Gly	Tyr	Thr	Leu	
				320					325					330	
Leu	Ala	Ala	Ile	Val	Glu	Arg	Ala	Ser	Gly	Cys	Lys	Tyr	Leu	Asp	
				335					340					345	
Tyr	Met	Gln	Lys	Ile	Phe	His	Asp	Leu	Asp	Met	Leu	Thr	Thr	Val	
				350					355					360	
Gln	Glu	Glu	Asn	Glu	Pro	Val	Ile	Tyr	Asn	Arg	Ala	Arg			
				365					370						

<210> 373

<211> 1021

<212> DNA

<213> Homo Sapien

<400> 373

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ctacgggctg ttagcccaga ccatggccca gtttggaggc ctgcccgtgc 150

ccctggacca gaccctgccc ttgaatgtga atccagccct gcccttgagt 200

cccacaggtc ttgcaggaag cttgacaaat gccctcagca atggcctgct 250

gtctgggggc ctgttgggca ttctggaaaa ccttccgctc ctggacatcc 300

tgaagcctgg aggaggtact tctggtggcc tccttggggg actgcttgga 350

Val Gln Ser Pro Asp Gly His Arg Leu Tyr Val Thr Ile Pro Leu
125 130 135

Gly Ile Lys Leu Gln Val Asn Thr Pro Leu Val Gly Ala Ser Leu
140 145 150

Leu Arg Leu Ala Val Lys Leu Asp Ile Thr Ala Glu Ile Leu Ala
155 160 165

Val Arg Asp Lys Gln Glu Arg Ile His Leu Val Leu Gly Asp Cys
170 175 180

Thr His Ser Pro Gly Ser Leu Gln Ile Ser Leu Leu Asp Gly Leu
185 190 195

Gly Pro Leu Pro Ile Gln Gly Leu Leu Asp Ser Leu Thr Gly Ile
200 205 210

Leu Asn Lys Val Leu Pro Glu Leu Val Gln Gly Asn Val Cys Pro
215 220 225

Leu Val Asn Glu Val Leu Arg Gly Leu Asp Ile Thr Leu Val His
230 235 240

Asp Ile Val Asn Met Leu Ile His Gly Leu Gln Phe Val Ile Lys
245 250 255

Val

<210> 375

<211> 1449

<212> DNA

<213> Homo Sapien

<400> 375

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ttgactgtcc tttaaataatg tcaagatcca gacttttcag tgtcacctca 100

gcgatctcaa cgatagggat cttgtgtttg ccgctattcc agttggtgct 150

ctcggaccta ccatgcgaag aagatgaaat gtgtgtaaat tataatgacc 200

aacaccctaa tggctggtat atctggatcc tctgctgct ggttttggtg 250

gcagctcttc tctgtggagc tgtggctcctc tgcctccagt gctgggtgag 300

gagacccga attgattctc acaggcgac catggcagtt tttgctgttg 350

gagacttgga ctctatttat gggacagaag cagctgtgag tccaactgtt 400

ggaattcacc ttcaaactca aaccctgac ctatatcctg ttctgctcc 450

atgttttggc cctttaggct cccacctcc atatgaagaa attgtaaaaa 500

caacctgatt ttaggtgtgg attatcaatt taaagtatta acgacatctg 550

taattccaaa acatcaaatt taggaatagt tatttcagtt gttggaaatg 600
 tccagagatc tattcatata gtctgaggaa ggacaattcg acaaaagaat 650
 ggatgttgga aaaaattttg gtcattggaga tgtttaaata gtaaagtagc 700
 aggcttttga tgtgtcactg ctgtatcata cttttatgct acacaaccaa 750
 attaatgctt ctccactagt atccaaacag gcaacaatta ggtgctggaa 800
 gtagtttcca tcacatttag gactccactg cagtatacag cacaccattt 850
 tctgctttta actctttcct agcatggggg ccataaaaat tattataatt 900
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 agatagtatt tgaatgaagg tgaggggaga gagtaggaaa aagaaaagtt 1000
 tggagttgaa gggtaaagga taaatgaaga ggaaaaggaa aagattacaa 1050
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 tgtagataga aggtgaagga gattgctgaa gatatagagc acatataatg 1150
 ccaacacggg gagaaaagaa aatttcccct tttacagtaa tgaatgtggc 1200
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 cagcatcatg ctaagaacct tcggcatagg tatctgttcc catgaggact 1300
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 agcaggggga cagacaaaaa catccatcac agatgacata tgatcttcag 1400
 ctgacaaatt tgttgaacaa aacaataaac atcaatagat atctaaaaa 1449

<210> 376

<211> 146

<212> PRT

<213> Homo Sapien

<400> 376

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Ile	Gly	Ile	Leu	Cys	Leu	Pro	Leu	Phe	Gln	Leu	Val	Leu	Ser	Asp
			20						25					30

Leu	Pro	Cys	Glu	Glu	Asp	Glu	Met	Cys	Val	Asn	Tyr	Asn	Asp	Gln
			35						40					45

His	Pro	Asn	Gly	Trp	Tyr	Ile	Trp	Ile	Leu	Leu	Leu	Leu	Val	Leu
			50						55					60

Val	Ala	Ala	Leu	Leu	Cys	Gly	Ala	Val	Val	Leu	Cys	Leu	Gln	Cys
			65						70					75

Trp	Leu	Arg	Arg	Pro	Arg	Ile	Asp	Ser	His	Arg	Arg	Thr	Met	Ala
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

	80		85		90
Val Phe Ala Val Gly Asp Leu Asp Ser Ile Tyr Gly Thr Glu Ala					
	95		100		105
Ala Val Ser Pro Thr Val Gly Ile His Leu Gln Thr Gln Thr Pro					
	110		115		120
Asp Leu Tyr Pro Val Pro Ala Pro Cys Phe Gly Pro Leu Gly Ser					
	125		130		135
Pro Pro Pro Tyr Glu Glu Ile Val Lys Thr Thr					
	140		145		

<210> 377
 <211> 1505
 <212> DNA
 <213> Homo Sapien

<400> 377
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 ggcgtgggccc catggccagg cccggcatgg agcgggtggcg cgaccggctg 150
 gcgctggtga cgggggcctc ggggggcatc ggcgcggcgg tggcccgggc 200
 cctggtccag cagggactga aggtggtggg ctgcgcccgc actgtgggca 250
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 ttgatccccct acagatgtga cctatcaaata gaagaggaca tcctctccat 350
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 cctgagaagg cagctgccac ctatgagcaa atgaagtgtc tcaaaccoga 800
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 aaaaa 1505

<210> 378

<211> 260

<212> PRT

<213> Homo Sapien

<400> 378

Met	Ala	Arg	Pro	Gly	Met	Glu	Arg	Trp	Arg	Asp	Arg	Leu	Ala	Leu	1	5	10	15
Val	Thr	Gly	Ala	Ser	Gly	Gly	Ile	Gly	Ala	Ala	Val	Ala	Arg	Ala	20	25	30	
Leu	Val	Gln	Gln	Gly	Leu	Lys	Val	Val	Gly	Cys	Ala	Arg	Thr	Val	35	40	45	
Gly	Asn	Ile	Glu	Glu	Leu	Ala	Ala	Glu	Cys	Lys	Ser	Ala	Gly	Tyr	50	55	60	
Pro	Gly	Thr	Leu	Ile	Pro	Tyr	Arg	Cys	Asp	Leu	Ser	Asn	Glu	Glu	65	70	75	
Asp	Ile	Leu	Ser	Met	Phe	Ser	Ala	Ile	Arg	Ser	Gln	His	Ser	Gly	80	85	90	
Val	Asp	Ile	Cys	Ile	Asn	Asn	Ala	Gly	Leu	Ala	Arg	Pro	Asp	Thr	95	100	105	
Leu	Leu	Ser	Gly	Ser	Thr	Ser	Gly	Trp	Lys	Asp	Met	Phe	Asn	Val	110	115	120	
Asn	Val	Leu	Ala	Leu	Ser	Ile	Cys	Thr	Arg	Glu	Ala	Tyr	Gln	Ser	125	130	135	
Met	Lys	Glu	Arg	Asn	Val	Asp	Asp	Gly	His	Ile	Ile	Asn	Ile	Asn				

140	145	150
Ser Met Ser Gly His Arg Val Leu Pro Leu Ser Val Thr His Phe		
155	160	165
Tyr Ser Ala Thr Lys Tyr Ala Val Thr Ala Leu Thr Glu Gly Leu		
170	175	180
Arg Gln Glu Leu Arg Glu Ala Gln Thr His Ile Arg Ala Thr Cys		
185	190	195
Ile Ser Pro Gly Val Val Glu Thr Gln Phe Ala Phe Lys Leu His		
200	205	210
Asp Lys Asp Pro Glu Lys Ala Ala Ala Thr Tyr Glu Gln Met Lys		
215	220	225
Cys Leu Lys Pro Glu Asp Val Ala Glu Ala Val Ile Tyr Val Leu		
230	235	240
Ser Thr Pro Ala His Ile Gln Ile Gly Asp Ile Gln Met Arg Pro		
245	250	255
Thr Glu Gln Val Thr		
260		

<210> 379

<211> 2340

<212> DNA

<213> Homo Sapien

<400> 379

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gacgcagctg acgcccgtt attagctctc gctgcgtcgc cccggctcag 150
aagctccgtg gcggcggcga ccgtgacgag aagcccacgg ccagctcagt 200
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ctcttcaaaa ctcatctcct gggtgactga gttaatagag tggatacaac 300
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gtcaagttac gtgagcaaat actagactta agcaaaagat atgttaaagc 600
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 accctaactt tgggtaattc tagtataaaa caaattatac ttttatttaa 2050
 atttccttg tagcaaactt aattgccaca tggtgcccta tatttcatag 2100

tatttattct ctatagtaac tgcttaagtg cagctagctt ctagatttag 2150
 actatataga atttagatat tgtattgttc gtcattataa tatgctacca 2200
 catgtagcaa taattacaat attttattaa aataaatatg tgaaatattg 2250
 tttcatgaaa gacagatttc caaatctctc ttctcttctc tgtactgtct 2300
 acctttatgt gaagaaatta atttatatgcc attgccaggt 2340

<210> 380
 <211> 140
 <212> PRT
 <213> Homo Sapien

<400> 380
 Met Phe Phe Thr Ile Ser Arg Lys Asn Met Ser Gln Lys Leu Ser
 1 5 10 15
 Leu Leu Leu Leu Val Phe Gly Leu Ile Trp Gly Leu Met Leu Leu
 20 25 30
 His Tyr Thr Phe Gln Gln Pro Arg His Gln Ser Ser Val Lys Leu
 35 40 45
 Arg Glu Gln Ile Leu Asp Leu Ser Lys Arg Tyr Val Lys Ala Leu
 50 55 60
 Ala Glu Glu Asn Lys Asn Thr Val Asp Val Glu Asn Gly Ala Ser
 65 70 75
 Met Ala Gly Tyr Ala Asp Leu Lys Arg Thr Ile Ala Val Leu Leu
 80 85 90
 Asp Asp Ile Leu Gln Arg Leu Val Lys Leu Glu Asn Lys Val Asp
 95 100 105
 Tyr Ile Val Val Asn Gly Ser Ala Ala Asn Thr Thr Asn Gly Thr
 110 115 120
 Ser Gly Asn Leu Val Pro Val Thr Thr Asn Lys Arg Thr Asn Val
 125 130 135
 Ser Gly Ser Ile Arg
 140

<210> 381
 <211> 1177
 <212> DNA
 <213> Homo Sapien

<400> 381
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 ggtggcctac accatcatgt cctcccacc ctcccttgac tgcgggccgt 100
 tcaggtgcag agtctcagtt gcccgggagc acctcccctc ccgaggcagt 150

ctgctcagag ggcctcggcc cagaattcca gttctggttt catgccagcc 200
 tgtaaaaggc catggaactt tgggtgaatc accgatgcc ttttaagaggg 250
 ttttctgccg ggatggaaat gttaggctcg tctgtgtctg cgctgttcat 300
 ttcagtagcc accagccacc tgtggccggt gagtgcttga aatgaggaac 350
 tgagaaaatt aatttctcat gtatttttct catttattta ttaattttta 400
 actgatagtt gtacatatat gggggtacat gtgatatttg gatacatgta 450
 tacaatatat aatgatcaaa tcagggtaac tgggatatac atcacatcaa 500
 acatttattt tttattcttt ttagacagag tctcactctg tcacccaggg 550
 tggagtgcag tggtgccatc tcagcttact gcaacctctg cctgccaggt 600
 tcaagcgatt ctcatgcctc cacctcccaa gtagctggga ctacaggcat 650
 gcaccacaat gcccaactaa tttttgtatt tttagtagag acgggggttt 700
 gccatgttgc ccaggctggc cttgaactcc tggcctcaaa caatccactt 750
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 gcctaaacat ttatcttttc tttgtgttgg gaactttgaa attatacaat 850
 gaattattgt taactgtcat ctccctgctg tgctatggaa cactgggact 900
 tcttcctctc atctaactgt atatttgtac cagttaacca accgtacttc 950
 atccccactc ctctctatcc ttcccaacct ctgatcacct cattctactc 1000
 tctacctcca tgagatccac ttttttagct cccacatgtg agtaagaaaa 1050
 tgcaatattt gtctttctgt gcctggctta tttcacttaa cataatgact 1100
 tcctgttcca tccatgttgc tgcaaatgac aggatttcgt tcttaatttc 1150
 aattaaaata accacacatg gcaaaaaa 1177

<210> 382
 <211> 111
 <212> PRT
 <213> Homo Sapien

<400> 382
 Met Gly Leu Leu Leu Leu Val Leu Phe Leu Ser Leu Leu Pro Val
 1 5 10 15
 Ala Tyr Thr Ile Met Ser Leu Pro Pro Ser Phe Asp Cys Gly Pro
 20 25 30
 Phe Arg Cys Arg Val Ser Val Ala Arg Glu His Leu Pro Ser Arg
 35 40 45
 Gly Ser Leu Leu Arg Gly Pro Arg Pro Arg Ile Pro Val Leu Val

	50		55		60
Ser Cys Gln Pro Val Lys Gly His Gly Thr Leu Gly Glu Ser Pro					
	65		70		75
Met Pro Phe Lys Arg Val Phe Cys Gln Asp Gly Asn Val Arg Ser					
	80		85		90
Phe Cys Val Cys Ala Val His Phe Ser Ser His Gln Pro Pro Val					
	95		100		105
Ala Val Glu Cys Leu Lys					
	110				

<210> 383
 <211> 2061
 <212> DNA
 <213> Homo Sapien

<400> 383
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 atgatcagcg cagcctggag catcttcctc atcgggacta aaattgggct 100
 gttccttcaa gtagcacctc tatcagttat ggctaaatcc tgtccatctg 150
 tgtgtcgctg cgatgcgggt ttcatttact gtaatgatcg ctttctgaca 200
 tccattccaa caggaatacc agaggatgct acaactctct accttcagaa 250
 caaccaaata aataatgctg ggattccttc agatttgaaa aacttgctga 300
 aagtagaaag aatataccta taccacaaca gtttagatga atttcctacc 350
 aacctcccaa agtatgtaaa agagttacat ttgcaagaaa ataacataag 400
 gactatcact tatgattcac tttcaaaaat tccctatctg gaagaattac 450
 atttagatga caactctgtc tctgcagtta gcatagaaga gggagcattc 500
 cgagacagca actatctccg actgcttttc ctgtcccgtat atcaccttag 550
 cacaattccc tgggggttgc ccaggactat agaagaacta cgcttggatg 600
 ataatcgcat atccactatt tcatcaccat ctcttcaagg tctcactagt 650
 ctaaaacgcc tgggttctaga tggaaacctg ttgaacaatc atgggttagg 700
 tgacaaagtt ttcttcaacc tagttaattt gacagagctg tccctgggtgc 750
 ggaattccct gactgctgca ccagtaaacc ttccaggcac aaacctgagg 800
 aagctttatc ttcaagataa ccacatcaat cgggtgcccc caaatgcttt 850
 ttcttatcta aggcagctct atcgactgga tatgtccaat aataacctaa 900
 gtaatttacc tcagggtatc tttgatgatt tggacaatat aacacaactg 950

attcttcgca acaatccctg gtattgcggg tgcaagatga aatgggtacg 1000
 tgactgggta caatcactac ctgtgaaggt caacgtgcgt gggctcatgt 1050
 gccaaagcccc agaaaagggt cgtgggatgg ctattaagga tctcaatgca 1100
 gaactgtttg attgtaagga cagtgggatt gtaagcacca ttcagataac 1150
 cactgcaata cccaacacag tgtatcctgc ccaaggacag tggccagctc 1200
 cagtgaccaa acagccagat attaagaacc ccaagctcac taaggatcaa 1250
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 tgtcacctct gataccattc atatctcttg gaaacttgct ctacctatga 1350
 ctgctttgag actcagctgg cttaaactgg gccatagccc ggcatttgga 1400
 tctataacag aaacaattgt aacaggggaa cgcagtgagt acttggtcac 1450
 agccctggag cctgattcac cctataaagt atgcatgggt cccatggaaa 1500
 ccagcaacct ctacctattt gatgaaactc ctgtttgtat tgagactgaa 1550
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 gaagctacag agacagtggg attccagact cagatcactc aactcatga 2000
 tgctgaagga ctcacagcag acttgtgttt tgggtttttt aaacctaagg 2050
 gaggtgatgg t 2061

<210> 384

<211> 649

<212> PRT

<213> Homo Sapien

<400> 384

Met	Ile	Ser	Ala	Ala	Trp	Ser	Ile	Phe	Leu	Ile	Gly	Thr	Lys	Ile
1				5					10				15	
Gly	Leu	Phe	Leu	Gln	Val	Ala	Pro	Leu	Ser	Val	Met	Ala	Lys	Ser
			20					25					30	

Cys	Pro	Ser	Val	Cys	Arg	Cys	Asp	Ala	Gly	Phe	Ile	Tyr	Cys	Asn		35	40	45
Asp	Arg	Phe	Leu	Thr	Ser	Ile	Pro	Thr	Gly	Ile	Pro	Glu	Asp	Ala		50	55	60
Thr	Thr	Leu	Tyr	Leu	Gln	Asn	Asn	Gln	Ile	Asn	Asn	Ala	Gly	Ile		65	70	75
Pro	Ser	Asp	Leu	Lys	Asn	Leu	Leu	Lys	Val	Glu	Arg	Ile	Tyr	Leu		80	85	90
Tyr	His	Asn	Ser	Leu	Asp	Glu	Phe	Pro	Thr	Asn	Leu	Pro	Lys	Tyr		95	100	105
Val	Lys	Glu	Leu	His	Leu	Gln	Glu	Asn	Asn	Ile	Arg	Thr	Ile	Thr		110	115	120
Tyr	Asp	Ser	Leu	Ser	Lys	Ile	Pro	Tyr	Leu	Glu	Glu	Leu	His	Leu		125	130	135
Asp	Asp	Asn	Ser	Val	Ser	Ala	Val	Ser	Ile	Glu	Glu	Gly	Ala	Phe		140	145	150
Arg	Asp	Ser	Asn	Tyr	Leu	Arg	Leu	Leu	Phe	Leu	Ser	Arg	Asn	His		155	160	165
Leu	Ser	Thr	Ile	Pro	Trp	Gly	Leu	Pro	Arg	Thr	Ile	Glu	Glu	Leu		170	175	180
Arg	Leu	Asp	Asp	Asn	Arg	Ile	Ser	Thr	Ile	Ser	Ser	Pro	Ser	Leu		185	190	195
Gln	Gly	Leu	Thr	Ser	Leu	Lys	Arg	Leu	Val	Leu	Asp	Gly	Asn	Leu		200	205	210
Leu	Asn	Asn	His	Gly	Leu	Gly	Asp	Lys	Val	Phe	Phe	Asn	Leu	Val		215	220	225
Asn	Leu	Thr	Glu	Leu	Ser	Leu	Val	Arg	Asn	Ser	Leu	Thr	Ala	Ala		230	235	240
Pro	Val	Asn	Leu	Pro	Gly	Thr	Asn	Leu	Arg	Lys	Leu	Tyr	Leu	Gln		245	250	255
Asp	Asn	His	Ile	Asn	Arg	Val	Pro	Pro	Asn	Ala	Phe	Ser	Tyr	Leu		260	265	270
Arg	Gln	Leu	Tyr	Arg	Leu	Asp	Met	Ser	Asn	Asn	Asn	Leu	Ser	Asn		275	280	285
Leu	Pro	Gln	Gly	Ile	Phe	Asp	Asp	Leu	Asp	Asn	Ile	Thr	Gln	Leu		290	295	300
Ile	Leu	Arg	Asn	Asn	Pro	Trp	Tyr	Cys	Gly	Cys	Lys	Met	Lys	Trp		305	310	315
Val	Arg	Asp	Trp	Leu	Gln	Ser	Leu	Pro	Val	Lys	Val	Asn	Val	Arg				

	320		325		330
Gly Leu Met Cys	Gln Ala Pro Glu Lys	Val Arg Gly Met Ala	Ile		
	335		340		345
Lys Asp Leu Asn	Ala Glu Leu Phe Asp	Cys Lys Asp Ser Gly	Ile		
	350		355		360
Val Ser Thr Ile	Gln Ile Thr Thr Ala	Ile Pro Asn Thr Val	Tyr		
	365		370		375
Pro Ala Gln Gly	Gln Trp Pro Ala Pro	Val Thr Lys Gln Pro	Asp		
	380		385		390
Ile Lys Asn Pro	Lys Leu Thr Lys Asp	Gln Gln Thr Thr Gly	Ser		
	395		400		405
Pro Ser Arg Lys	Thr Ile Thr Ile Thr	Val Lys Ser Val Thr	Ser		
	410		415		420
Asp Thr Ile His	Ile Ser Trp Lys Leu	Ala Leu Pro Met Thr	Ala		
	425		430		435
Leu Arg Leu Ser	Trp Leu Lys Leu Gly	His Ser Pro Ala Phe	Gly		
	440		445		450
Ser Ile Thr Glu	Thr Ile Val Thr Gly	Glu Arg Ser Glu Tyr	Leu		
	455		460		465
Val Thr Ala Leu	Glu Pro Asp Ser Pro	Tyr Lys Val Cys Met	Val		
	470		475		480
Pro Met Glu Thr	Ser Asn Leu Tyr Leu	Phe Asp Glu Thr Pro	Val		
	485		490		495
Cys Ile Glu Thr	Glu Thr Ala Pro Leu	Arg Met Tyr Asn Pro	Thr		
	500		505		510
Thr Thr Leu Asn	Arg Glu Gln Glu Lys	Glu Pro Tyr Lys Asn	Pro		
	515		520		525
Asn Leu Pro Leu	Ala Ala Ile Ile Gly	Gly Ala Val Ala Leu	Val		
	530		535		540
Thr Ile Ala Leu	Leu Ala Leu Val Cys	Trp Tyr Val His Arg	Asn		
	545		550		555
Gly Ser Leu Phe	Ser Arg Asn Cys Ala	Tyr Ser Lys Gly Arg	Arg		
	560		565		570
Arg Lys Asp Asp	Tyr Ala Glu Ala Gly	Thr Lys Lys Asp Asn	Ser		
	575		580		585
Ile Leu Glu Ile	Arg Glu Thr Ser Phe	Gln Met Leu Pro Ile	Ser		
	590		595		600
Asn Glu Pro Ile	Ser Lys Glu Glu Phe	Val Ile His Thr Ile	Phe		
	605		610		615

Pro Pro Asn Gly Met Asn Leu Tyr Lys Asn Asn His Ser Glu Ser
620 625 630

Ser Ser Asn Arg Ser Tyr Arg Asp Ser Gly Ile Pro Asp Ser Asp
635 640 645

His Ser His Ser

<210> 385

<211> 1882

<212> DNA

<213> Homo Sapien

<400> 385

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ccaggcttct tggcagccct gccgggccac ttgtcttcat gtctgccagg 100
gggaggtggg aaggaggtgg gaggagggcg tgcagaggca gtctgggctt 150
ggccagagct cagggtgctg agcgtgtgac cagcagtgag cagaggccgg 200
ccatggccag cctggggctg ctgctcctgc tcttactgac agcactgccca 250
ccgctgtggt cctcctcact gcctgggctg gacactgctg aaagtaaagc 300
caccattgca gacctgatcc tgtctgcgct ggagagagcc accgtcttcc 350
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gtgctggaag agcagctaaa aagtgtccgg gagaagtggg cccaggagcc 450
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aggctgccat ccagagatcc ctccactacc tcaagctgag tgatcccaag 550
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cccaggactc attctcagag gagagaagtg acgtgtgcct ggtgcagctg 700
ctgggaaccg ggacggacag cagcgagccc tgcggcctct cagacctctg 750
caggagcctc atgaccaagc ccggctgctc aggctactgc ctgtcccacc 800
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tcttcatgga aaacatcatg ttctgtggaa tgggcggctt ctccgacttc 1000
tacaagctcc ggtggctgga ggccattctc agctggcaga aacagcagga 1050
aggatgcttc ggggagcctg atgctgaaga tgaagaatta tctaaagcta 1100

Leu	Glu	Glu	Gln	Leu	Lys	Ser	Val	Arg	Glu	Lys	Trp	Ala	Gln	Glu	
				110					115					120	
Pro	Leu	Leu	Gln	Pro	Leu	Ser	Leu	Arg	Val	Gly	Met	Leu	Gly	Glu	
				125					130					135	
Lys	Leu	Glu	Ala	Ala	Ile	Gln	Arg	Ser	Leu	His	Tyr	Leu	Lys	Leu	
				140					145					150	
Ser	Asp	Pro	Lys	Tyr	Leu	Arg	Glu	Phe	Gln	Leu	Thr	Leu	Gln	Pro	
				155					160					165	
Gly	Phe	Trp	Lys	Leu	Pro	His	Ala	Trp	Ile	His	Thr	Asp	Ala	Ser	
				170					175					180	
Leu	Val	Tyr	Pro	Thr	Phe	Gly	Pro	Gln	Asp	Ser	Phe	Ser	Glu	Glu	
				185					190					195	
Arg	Ser	Asp	Val	Cys	Leu	Val	Gln	Leu	Leu	Gly	Thr	Gly	Thr	Asp	
				200					205					210	
Ser	Ser	Glu	Pro	Cys	Gly	Leu	Ser	Asp	Leu	Cys	Arg	Ser	Leu	Met	
				215					220					225	
Thr	Lys	Pro	Gly	Cys	Ser	Gly	Tyr	Cys	Leu	Ser	His	Gln	Leu	Leu	
				230					235					240	
Phe	Phe	Leu	Trp	Ala	Arg	Met	Arg	Gly	Cys	Thr	Gln	Gly	Pro	Leu	
				245					250					255	
Gln	Gln	Ser	Gln	Asp	Tyr	Ile	Asn	Leu	Phe	Cys	Ala	Asn	Met	Met	
				260					265					270	
Asp	Leu	Asn	Arg	Arg	Ala	Glu	Ala	Ile	Gly	Tyr	Ala	Tyr	Pro	Thr	
				275					280					285	
Arg	Asp	Ile	Phe	Met	Glu	Asn	Ile	Met	Phe	Cys	Gly	Met	Gly	Gly	
				290					295					300	
Phe	Ser	Asp	Phe	Tyr	Lys	Leu	Arg	Trp	Leu	Glu	Ala	Ile	Leu	Ser	
				305					310					315	
Trp	Gln	Lys	Gln	Gln	Glu	Gly	Cys	Phe	Gly	Glu	Pro	Asp	Ala	Glu	
				320					325					330	
Asp	Glu	Glu	Leu	Ser	Lys	Ala	Ile	Gln	Tyr	Gln	Gln	His	Phe	Ser	
				335					340					345	
Arg	Arg	Val	Lys	Arg	Arg	Glu	Lys	Gln	Phe	Pro	Asp	Ser	Arg	Ser	
				350					355					360	
Val	Ala	Gln	Ala	Gly	Val	Gln	Trp	Arg	Asn	Leu	Gly	Ser	Leu	Gln	
				365					370					375	
Pro	Leu	Pro	Pro	Gly	Phe	Lys	Gln	Phe	Ser	Cys	Leu	Ile	Leu	Pro	
				380					385					390	
Ser	Ser	Trp	Asp	Tyr	Arg	Ser	Val	Pro	Pro	Tyr	Leu	Ala	Asn	Phe	

	395		400		405
Tyr Ile Phe Leu Val Glu Thr Gly Phe His His Val Ala His Ala					
	410		415		420
Gly Leu Glu Leu Leu Ile Ser Arg Asp Pro Pro Thr Ser Gly Ser					
	425		430		435
Gln Ser Val Gly Leu					
	440				

<210> 387
 <211> 1094
 <212> DNA
 <213> Homo Sapien

<400> 387
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 gcccggggct gctgctgagg gatcgggagg gaggggggtc ggcattaggag 150
 atcgcttcaa gattgagggg cgtgcagttg ttccaggggt gaagcctcag 200
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 atcccagctg tgatctctta caactgtgta tgtaacttt ttagcacatg 900
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 aggtcaatat tgatgtcact gaattaatta cagtgtccta tagaaaatgc 1000
 cattaataaa ttatatgaac tactatacat tatgtatatt aattaaaaca 1050

tcttaatcca gaaatcaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1094

<210> 388

<211> 242

<212> PRT

<213> Homo Sapien

<400> 388

Met Ala Ala Ala Leu Trp Gly Phe Phe Pro Val Leu Leu Leu Leu
1 5 10 15

Leu Leu Ser Gly Asp Val Gln Ser Ser Glu Val Pro Gly Ala Ala
20 25 30

Ala Glu Gly Ser Gly Gly Ser Gly Val Gly Ile Gly Asp Arg Phe
35 40 45

Lys Ile Glu Gly Arg Ala Val Val Pro Gly Val Lys Pro Gln Asp
50 55 60

Trp Ile Ser Ala Ala Arg Val Leu Val Asp Gly Glu Glu His Val
65 70 75

Gly Phe Leu Lys Thr Asp Gly Ser Phe Val Val His Asp Ile Pro
80 85 90

Ser Gly Ser Tyr Val Val Glu Val Val Ser Pro Ala Tyr Arg Phe
95 100 105

Asp Pro Val Arg Val Asp Ile Thr Ser Lys Gly Lys Met Arg Ala
110 115 120

Arg Tyr Val Asn Tyr Ile Lys Thr Ser Glu Val Val Arg Leu Pro
125 130 135

Tyr Pro Leu Gln Met Lys Ser Ser Gly Pro Pro Ser Tyr Phe Ile
140 145 150

Lys Arg Glu Ser Trp Gly Trp Thr Asp Phe Leu Met Asn Pro Met
155 160 165

Val Met Met Met Val Leu Pro Leu Leu Ile Phe Val Leu Leu Pro
170 175 180

Lys Val Val Asn Thr Ser Asp Pro Asp Met Arg Arg Glu Met Glu
185 190 195

Gln Ser Met Asn Met Leu Asn Ser Asn His Glu Leu Pro Asp Val
200 205 210

Ser Glu Phe Met Thr Arg Leu Phe Ser Ser Lys Ser Ser Gly Lys
215 220 225

Ser Ser Ser Gly Ser Ser Lys Thr Gly Lys Ser Gly Ala Gly Lys
230 235 240

Arg Arg

<210> 389
 <211> 1875
 <212> DNA
 <213> Homo Sapien

<400> 389
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 atggtaccac ctcccgaaaa tgtcagaatg aattctgtta atttcaagaa 150
 cattctacag tgggagtcac ctgcttttgc caaagggaac ctgactttca 200
 cagctcagta cctaagttat aggatattcc aagataaatg catgaatact 250
 accttgacgg aatgtgattt ctcaagtctt tccaagtatg gtgaccacac 300
 cttgagagtc agggctgaat ttgcagatga gcattcagac tgggtaaaca 350
 tcaccttctg tctgtggat gacaccatta ttggaccccc tggaatgcaa 400
 gtagaagtac ttgctgattc ttacatatg cgtttcttag cccctaaaat 450
 tgagaatgaa tacgaaactt ggactatgaa gaatgtgtat aactcatgga 500
 cttataatgt gcaatactgg aaaaacggta ctgatgaaaa gtttcaaatt 550
 actccccagt atgactttga ggtcctcaga aacctggagc catggacaac 600
 ttattgtgtt caagtctgag ggtttcttcc tgatcggaac aaagctgggg 650
 aatggagtga gcctgtctgt gagcaaacaa cccatgacga aacgggtcccc 700
 tcttgatgg tggccgtcat cctcatggcc tcggtcttca tgggtctgct 750
 ggcactcctc ggctgcttct ccttgtctgt gtgcgtttac aagaagacaa 800
 agtacgcctt ctcccctagg aattctcttc cacagcacct gaaagagttt 850
 ttggggccatc ctcatcataa cacacttctg tttttctctt tccattgtc 900
 ggatgagaat gatgtttttg acaagctaag tgtcattgca gaagactctg 950
 agagcggcaa gcagaatcct ggtgacagct gcagcctcgg gacccccct 1000
 gggcaggggc cccaaagcta ggctctgaga aggaaacaca ctcggtggg 1050
 cacagtgacg tactccatct cacatctgcc tcagtgaggg atcagggcag 1100
 caaacaaggg ccaagaccat ctgagccagc cccacatcta gaactccaga 1150
 cctggactta gccaccagag agctacattt taaaggctgt cttggcaaaa 1200
 atactccatt tgggaactca ctgccttata aaggctttca tgatgttttc 1250
 agaagttggc cactgagagt gtaattttca gccttttata tcactaaaat 1300

aagatcatgt ttttaattgtg agaaacaggg ccgagcacag tggctcacgc 1350
 ctgtaatacc agcaccttag aggtcgaggc aggcggatca cttgaggtca 1400
 ggagttcaag accagcctgg ccaatatggt gaaacccagt ctctactaaa 1450
 aatacaaaaa ttagctaggc atgatggcgc atgcctataa tcccagctac 1500
 tcgagtgcct gaggcaggag aattgcatga acccgggagg aggaggagga 1550
 ggttgcagtg agccgagata gcggcactgc actccagcct gggtgacaaa 1600
 gtgagactcc atctcaaaaa aaaaaaaaaa aaattgtgag aaacagaaat 1650
 acttaaaatg aggaataaga atggagatgt tacatctggt agatgtaaca 1700
 ttctaccaga ttatggatgg actgatctga aaatcgacct caactcaagg 1750
 gtggtcagct caatgctaca cagagcacgg acttttggat tctttgcagt 1800
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 ccattaaagt tttactctgt gttgc 1875

<210> 390
 <211> 325
 <212> PRT
 <213> Homo Sapien

<400> 390
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 Ser Ala Leu Gly Met Val Pro Pro Pro Glu Asn Val Arg Met Asn
 20 25 30
 Ser Val Asn Phe Lys Asn Ile Leu Gln Trp Glu Ser Pro Ala Phe
 35 40 45
 Ala Lys Gly Asn Leu Thr Phe Thr Ala Gln Tyr Leu Ser Tyr Arg
 50 55 60
 Ile Phe Gln Asp Lys Cys Met Asn Thr Thr Leu Thr Glu Cys Asp
 65 70 75
 Phe Ser Ser Leu Ser Lys Tyr Gly Asp His Thr Leu Arg Val Arg
 80 85 90
 Ala Glu Phe Ala Asp Glu His Ser Asp Trp Val Asn Ile Thr Phe
 95 100 105
 Cys Pro Val Asp Asp Thr Ile Ile Gly Pro Pro Gly Met Gln Val
 110 115 120
 Glu Val Leu Ala Asp Ser Leu His Met Arg Phe Leu Ala Pro Lys
 125 130 135
 Ile Glu Asn Glu Tyr Glu Thr Trp Thr Met Lys Asn Val Tyr Asn

	140		145		150
Ser Trp Thr Tyr	Asn Val Gln Tyr Trp	Lys Asn Gly Thr Asp	Glu		
	155		160		165
Lys Phe Gln Ile	Thr Pro Gln Tyr Asp	Phe Glu Val Leu Arg	Asn		
	170		175		180
Leu Glu Pro Trp	Thr Thr Tyr Cys Val	Gln Val Arg Gly Phe	Leu		
	185		190		195
Pro Asp Arg Asn	Lys Ala Gly Glu Trp	Ser Glu Pro Val Cys	Glu		
	200		205		210
Gln Thr Thr His	Asp Glu Thr Val Pro	Ser Trp Met Val Ala	Val		
	215		220		225
Ile Leu Met Ala	Ser Val Phe Met Val	Cys Leu Ala Leu Leu	Gly		
	230		235		240
Cys Phe Ser Leu	Leu Trp Cys Val Tyr	Lys Lys Thr Lys Tyr	Ala		
	245		250		255
Phe Ser Pro Arg	Asn Ser Leu Pro Gln	His Leu Lys Glu Phe	Leu		
	260		265		270
Gly His Pro His	His Asn Thr Leu Leu	Phe Phe Ser Phe Pro	Leu		
	275		280		285
Ser Asp Glu Asn	Asp Val Phe Asp Lys	Leu Ser Val Ile Ala	Glu		
	290		295		300
Asp Ser Glu Ser	Gly Lys Gln Asn Pro	Gly Asp Ser Cys Ser	Leu		
	305		310		315
Gly Thr Pro Pro	Gly Gln Gly Pro Gln	Ser			
	320		325		

<210> 391

<211> 1157

<212> DNA

<213> Homo Sapien

<400> 391

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gaatcaagtg gaaccggaag gccctgcca gcaactgcca gatcactgag 200

gccaggtgg ctgagaaccg cccgggagcc ttcataagc aaggccgcaa 250

gctcgacatt gacttcggag ccgagggcaa caggtactac gaggccaact 300

actggcagtt ccccgatggc atccactaca acggctgctc tgaggctaata 350

Tyr	Asn	Gly	Cys	Ser	Glu	Ala	Asn	Val	Thr	Lys	Glu	Ala	Phe	Val	
				95					100					105	
Thr	Gly	Cys	Ile	Asn	Ala	Thr	Gln	Ala	Ala	Asn	Gln	Gly	Glu	Phe	
				110					115					120	
Gln	Lys	Pro	Asp	Asn	Lys	Leu	His	Gln	Gln	Val	Leu	Trp	Arg	Leu	
				125					130					135	
Val	Gln	Glu	Leu	Cys	Ser	Leu	Lys	His	Cys	Glu	Phe	Trp	Leu	Glu	
				140					145					150	
Arg	Gly	Ala	Gly	Leu	Arg	Val	Thr	Met	His	Gln	Pro	Val	Leu	Leu	
				155					160					165	
Cys	Leu	Leu	Ala	Leu	Ile	Trp	Leu	Met	Val	Lys					
				170					175						

<210> 393
 <211> 1705
 <212> DNA
 <213> Homo Sapien

<400> 393
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 ccagctgcct ccaggcagcc agccctcaag catcacttac aggaccagag 150
 ggacaagaca tgactgtgat gaggagctgc tttcgccaat ttaacaccaa 200
 gaagaattga ggctgcttgg gaggaaggcc aggaggaaca cgagactgag 250
 agatgaattt tcaacagagg ctgcaaagcc tgtggacttt agccagaccc 300
 ttctgccctc ctttgctggc gacagcctct caaatgcaga tggttgtgct 350
 cccttgccctg ggttttacct tgcttctctg gagccaggta tcagggggccc 400
 agggccaaga attccacttt gggccctgcc aagtgaaggg ggttggtccc 450
 cagaaaactgt ggggaagcctt ctgggctgtg aaagacacta tgcaagctca 500
 ggataacatc acgagtgccg ggctgctgca gcaggagggt ctgcagaacg 550
 tctcggatgc tgagagctgt taccttgtcc acaccctgct ggagttctac 600
 ttgaaaactg ttttcaaaaa ccaccacaat agaacagttg aagtcaggac 650
 tctgaagtca ttctctactc tggccaacaa ctttggttctc atcgtgtcac 700
 aactgcaacc cagtcaagaa aatgagatgt tttccatcag agacagtgca 750
 cacaggcggg ttctgctatt ccggagagca ttcaaacagt tggacgtaga 800
 agcagctctg accaaagccc ttggggaagt ggacattctt ctgacctgga 850

Cys Lys Leu Glu Ile Phe His Phe Ala Cys Gln Trp Gly Arg Ser
35 40 45
Leu Ser Leu Ser Phe Tyr Phe Leu Lys Phe Gln Leu Ser Asp Ser
50 55 60
Gly Gly Thr Cys Glu Gly Leu Phe Tyr Glu Tyr Ile Ala
65 70

<210> 397

<211> 1750

<212> DNA

<213> Homo Sapien

<400> 397

catgccgctg ccgccgctgc tgctgttgct cctggcggcg ccttggggac 50
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ttcttatcca tcaacatgaa gaatgtccta caatggactc caccagaggg 150
tcttcaagga gttaaagtta cttacactgt gcagtatttc atatatgggc 200
aaaagaaatg gctgaataaa tcagaatgca gaaatatcaa tagaacctac 250
tgtgatcttt ctgctgaaac ttctgactac gaacaccagt attatgccaa 300
agttaaggcc atttggggaa caaagtgttc caaatgggct gaaagtggac 350
ggttctatcc ttttttagaa acacaaattg gccaccaga ggtggcactg 400
actacagatg agaagtcctt ttctgttgct ctgacagctc cagagaagtg 450
gaagagaaat ccagaagacc ttctgtttc catgcaacaa atatactcca 500
atctgaagta taacgtgtct gtgttgaata ctaaatcaaa cagaacgtgg 550
tcccagtggtg tgaccaacca cacgctggtg ctcacctggc tggagccgaa 600
cactctttac tgcgtacacg tggagtctt cgtcccaggg cccctcgcc 650
gtgctcagcc ttctgagaag cagtgtgcca ggactttgaa agatcaatca 700
tcagagttca aggctaaaat catcttctgg tatgttttgc ccatatctat 750
taccgtgttt cttttttctg tgatgggcta ttccatctac cgatatatcc 800
acgttggcaa agagaaacac ccagcaaatt tgattttgat ttatggaaat 850
gaatttgaca aaagattctt tgtgcctgct gaaaaaatcg tgattaactt 900
tatcaccctc aatatctcgg atgattctaa aatttctcat caggatatga 950
gtttactggg aaaaagcagt gatgtatcca gccttaatga tctcagccc 1000
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gtatgcttcg catttgatgg aaattttttg tgactctgaa gaaaacacgg 1100

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tgccggggcct gaagagcagg agctcagttt gcaggaggag gtgtccacac 1250
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gctcggagag gagggctctt tatctagact ctatgaggag ccggctccag 1550
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tggggggttat atgtgcagat ggaaaactga tgccaacact tccttttgcc 1650
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<210> 398

<211> 542

<212> PRT

<213> Homo Sapien

<400> 398

Met	Pro	Leu	Pro	Pro	Leu	Leu	Leu	Leu	Leu	Leu	Ala	Ala	Pro	Trp
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Gly	Arg	Ala	Val	Pro	Cys	Val	Ser	Gly	Gly	Leu	Pro	Lys	Pro	Ala
				20					25					30
Asn	Ile	Thr	Phe	Leu	Ser	Ile	Asn	Met	Lys	Asn	Val	Leu	Gln	Trp
				35					40					45
Thr	Pro	Pro	Glu	Gly	Leu	Gln	Gly	Val	Lys	Val	Thr	Tyr	Thr	Val
				50					55					60
Gln	Tyr	Phe	Ile	Tyr	Gly	Gln	Lys	Lys	Trp	Leu	Asn	Lys	Ser	Glu
				65					70					75
Cys	Arg	Asn	Ile	Asn	Arg	Thr	Tyr	Cys	Asp	Leu	Ser	Ala	Glu	Thr
				80					85					90
Ser	Asp	Tyr	Glu	His	Gln	Tyr	Tyr	Ala	Lys	Val	Lys	Ala	Ile	Trp
				95					100					105
Gly	Thr	Lys	Cys	Ser	Lys	Trp	Ala	Glu	Ser	Gly	Arg	Phe	Tyr	Pro
				110					115					120
Phe	Leu	Glu	Thr	Gln	Ile	Gly	Pro	Pro	Glu	Val	Ala	Leu	Thr	Thr
				125					130					135

Asp	Glu	Lys	Ser	Ile 140	Ser	Val	Val	Leu	Thr 145	Ala	Pro	Glu	Lys	Trp 150
Lys	Arg	Asn	Pro	Glu 155	Asp	Leu	Pro	Val	Ser 160	Met	Gln	Gln	Ile	Tyr 165
Ser	Asn	Leu	Lys	Tyr 170	Asn	Val	Ser	Val	Leu 175	Asn	Thr	Lys	Ser	Asn 180
Arg	Thr	Trp	Ser	Gln 185	Cys	Val	Thr	Asn	His 190	Thr	Leu	Val	Leu	Thr 195
Trp	Leu	Glu	Pro	Asn 200	Thr	Leu	Tyr	Cys	Val 205	His	Val	Glu	Ser	Phe 210
Val	Pro	Gly	Pro	Pro 215	Arg	Arg	Ala	Gln	Pro 220	Ser	Glu	Lys	Gln	Cys 225
Ala	Arg	Thr	Leu	Lys 230	Asp	Gln	Ser	Ser	Glu 235	Phe	Lys	Ala	Lys	Ile 240
Ile	Phe	Trp	Tyr	Val 245	Leu	Pro	Ile	Ser	Ile 250	Thr	Val	Phe	Leu	Phe 255
Ser	Val	Met	Gly	Tyr 260	Ser	Ile	Tyr	Arg	Tyr 265	Ile	His	Val	Gly	Lys 270
Glu	Lys	His	Pro	Ala 275	Asn	Leu	Ile	Leu	Ile 280	Tyr	Gly	Asn	Glu	Phe 285
Asp	Lys	Arg	Phe	Phe 290	Val	Pro	Ala	Glu	Lys 295	Ile	Val	Ile	Asn	Phe 300
Ile	Thr	Leu	Asn	Ile 305	Ser	Asp	Asp	Ser	Lys 310	Ile	Ser	His	Gln	Asp 315
Met	Ser	Leu	Leu	Gly 320	Lys	Ser	Ser	Asp	Val 325	Ser	Ser	Leu	Asn	Asp 330
Pro	Gln	Pro	Ser	Gly 335	Asn	Leu	Arg	Pro	Pro 340	Gln	Glu	Glu	Glu	Glu 345
Val	Lys	His	Leu	Gly 350	Tyr	Ala	Ser	His	Leu 355	Met	Glu	Ile	Phe	Cys 360
Asp	Ser	Glu	Glu	Asn 365	Thr	Glu	Gly	Thr	Ser 370	Leu	Thr	Gln	Gln	Glu 375
Ser	Leu	Ser	Arg	Thr 380	Ile	Pro	Pro	Asp	Lys 385	Thr	Val	Ile	Glu	Tyr 390
Glu	Tyr	Asp	Val	Arg 395	Thr	Thr	Asp	Ile	Cys 400	Ala	Gly	Pro	Glu	Glu 405
Gln	Glu	Leu	Ser	Leu 410	Gln	Glu	Glu	Val	Ser 415	Thr	Gln	Gly	Thr	Leu 420
Leu	Glu	Ser	Gln	Ala	Ala	Leu	Ala	Val	Leu	Gly	Pro	Gln	Thr	Leu

425	430	435
Gln Tyr Ser Tyr Thr Pro Gln Leu Gln Asp Leu Asp Pro Leu Ala		
440	445	450
Gln Glu His Thr Asp Ser Glu Glu Gly Pro Glu Glu Glu Pro Ser		
455	460	465
Thr Thr Leu Val Asp Trp Asp Pro Gln Thr Gly Arg Leu Cys Ile		
470	475	480
Pro Ser Leu Ser Ser Phe Asp Gln Asp Ser Glu Gly Cys Glu Pro		
485	490	495
Ser Glu Gly Asp Gly Leu Gly Glu Glu Gly Leu Leu Ser Arg Leu		
500	505	510
Tyr Glu Glu Pro Ala Pro Asp Arg Pro Pro Gly Glu Asn Glu Thr		
515	520	525
Tyr Leu Met Gln Phe Met Glu Glu Trp Gly Leu Tyr Val Gln Met		
530	535	540

Glu Asn

<210> 399
 <211> 1515
 <212> DNA
 <213> Homo Sapien

<400> 399
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 cagagtggat gctacaacat gatctaattc ccggagactt gagggacctc 150
 cgagtagaac ctgttacaac tagtggtgca acaggggact attcaatttt 200
 gatgaatgta agctgggtac tccgggcaga tgccagcatc cgcttggtga 250
 aggccaccaa gatttgtgtg acggggcaaaa gcaacttcca gtcctacagc 300
 tgtgtgaggt gcaattacac agaggccttc cagactcaga ccagaccctc 350
 tggtggtaaa tggacatttt cctacatcgg cttccctgta gagctgaaca 400
 cagtctattt cattggggcc cataatattc ctaatgcaaa tatgaatgaa 450
 gatggccctt ccatgtctgt gaatttcacc tcaccaggct gcctagacca 500
 cataatgaaa tataaaaaaa agtgtgtcaa ggccggaagc ctgtgggatc 550
 cgaacatcac tgcttgtaag aagaatgagg agacagtaga agtgaacttc 600
 acaaccactc ccctgggaaa cagatacatg gctcttatcc aacacagcac 650

				80					85					90
Lys	Ser	Asn	Phe	Gln 95	Ser	Tyr	Ser	Cys	Val 100	Arg	Cys	Asn	Tyr	Thr 105
Glu	Ala	Phe	Gln	Thr 110	Gln	Thr	Arg	Pro	Ser 115	Gly	Gly	Lys	Trp	Thr 120
Phe	Ser	Tyr	Ile	Gly 125	Phe	Pro	Val	Glu	Leu 130	Asn	Thr	Val	Tyr	Phe 135
Ile	Gly	Ala	His	Asn 140	Ile	Pro	Asn	Ala	Asn 145	Met	Asn	Glu	Asp	Gly 150
Pro	Ser	Met	Ser	Val 155	Asn	Phe	Thr	Ser	Pro 160	Gly	Cys	Leu	Asp	His 165
Ile	Met	Lys	Tyr	Lys 170	Lys	Lys	Cys	Val	Lys 175	Ala	Gly	Ser	Leu	Trp 180
Asp	Pro	Asn	Ile	Thr 185	Ala	Cys	Lys	Lys	Asn 190	Glu	Glu	Thr	Val	Glu 195
Val	Asn	Phe	Thr	Thr 200	Thr	Pro	Leu	Gly	Asn 205	Arg	Tyr	Met	Ala	Leu 210
Ile	Gln	His	Ser	Thr 215	Ile	Ile	Gly	Phe	Ser 220	Gln	Val	Phe	Glu	Pro 225
His	Gln	Lys	Lys	Gln 230	Thr	Arg	Ala	Ser	Val 235	Val	Ile	Pro	Val	Thr 240
Gly	Asp	Ser	Glu	Gly 245	Ala	Thr	Val	Gln	Leu 250	Thr	Pro	Tyr	Phe	Pro 255
Thr	Cys	Gly	Ser	Asp 260	Cys	Ile	Arg	His	Lys 265	Gly	Thr	Val	Val	Leu 270
Cys	Pro	Gln	Thr	Gly 275	Val	Pro	Phe	Pro	Leu 280	Asp	Asn	Asn	Lys	Ser 285
Lys	Pro	Gly	Gly	Trp 290	Leu	Pro	Leu	Leu	Leu 295	Leu	Ser	Leu	Leu	Val 300
Ala	Thr	Trp	Val	Leu 305	Val	Ala	Gly	Ile	Tyr 310	Leu	Met	Trp	Arg	His 315
Glu	Arg	Ile	Lys	Lys 320	Thr	Ser	Phe	Ser	Thr 325	Thr	Thr	Leu	Leu	Pro 330
Pro	Ile	Lys	Val	Leu 335	Val	Val	Tyr	Pro	Ser 340	Glu	Ile	Cys	Phe	His 345
His	Thr	Ile	Cys	Tyr 350	Phe	Thr	Glu	Phe	Leu 355	Gln	Asn	His	Cys	Arg 360
Ser	Glu	Val	Ile	Leu 365	Glu	Lys	Trp	Gln	Lys 370	Lys	Lys	Ile	Ala	Glu 375

Met	Gly	Pro	Val	Gln	Trp	Leu	Ala	Thr	Gln	Lys	Lys	Ala	Ala	Asp	380	385	390
Lys	Val	Val	Phe	Leu	Leu	Ser	Asn	Asp	Val	Asn	Ser	Val	Cys	Asp	395	400	405
Gly	Thr	Cys	Gly	Lys	Ser	Glu	Gly	Ser	Pro	Ser	Glu	Asn	Ser	Gln	410	415	420
Asp	Leu	Phe	Pro	Leu	Ala	Phe	Asn	Leu	Phe	Cys	Ser	Asp	Leu	Arg	425	430	435
Ser	Gln	Ile	His	Leu	His	Lys	Tyr	Val	Val	Val	Tyr	Phe	Arg	Glu	440	445	450
Ile	Asp	Thr	Lys	Asp	Asp	Tyr	Asn	Ala	Leu	Ser	Val	Cys	Pro	Lys	455	460	465
Tyr	His	Leu	Met	Lys	Asp	Ala	Thr	Ala	Phe	Cys	Ala	Glu	Leu	Leu	470	475	480
His	Val	Lys	Gln	Gln	Val	Ser	Ala	Gly	Lys	Arg	Ser	Gln	Ala	Cys	485	490	495
His	Asp	Gly	Cys	Cys	Ser	Leu									500		

<210> 401
 <211> 2275
 <212> DNA
 <213> Homo Sapien

<400> 401
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 ttgctctctc tacttcggag cgaacagcag gacaatccac acttccgtag 150
 cctcctgggg tcggccgccc agccagcccg gggcccgcgc cccagcacc 200
 cgttgcaggg cagaaaagag aagagagttg acaacatcga gatacagaaa 250
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 gagctgtttt tccgagatat tgagcgtggg gatatagtga ttggaagaat 450
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 ccaaactggg gacatcattc gagctggaat caaggatatt gacagatacc 650

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caggagaagt gttgagctaa atagcaattc tttggagtcc tatgaaaatg 800
tcatgcagag ttccttggga tttgttaatc caggagtagt tgaattcctt 850
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gacacttgta gagagaggag gacagttaga agaagaagaa aagtttttaa 1250
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tgctgatgaa tcagtgtctt catcatcatc ctcttctctt tctggtcaca 1550
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gaaaagacac agataaaaga gaaagataga tgccctctct cttcatcttc 1800
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ggcattgtta tcatagatga cagctccatt catgttactg accctgaaga 1950
ccttcaagtg ggacaagata tggaggtgga agacagtggg attgatgatc 2000
ctgaccacgg gtaggcttag gtttatgtgt gtgtatgtgt cttagttttt 2050
aacaacaaaaa ttaaaaagta aaaaaactaa aaatagaaaa atgcttagag 2100

aataaggata taaagaatat ttttgtgcag ttgaacaatg agtgcttaag 2150
 ctaaagtgtca tcacaaaaga gtaaaaaaat ttacaaaat taaaaatgtt 2200
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 aaaattatattt ttatgaattt actgt 2275

<210> 402
 <211> 653
 <212> PRT
 <213> Homo Sapien

<400> 402
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 20 25 30
 Phe Arg Ser Leu Leu Gly Ser Ala Ala Glu Pro Ala Arg Gly Pro
 35 40 45
 Pro Pro Gln His Pro Leu Gln Gly Arg Lys Glu Lys Arg Val Asp
 50 55 60
 Asn Ile Glu Ile Gln Lys Phe Ile Ser Lys Lys Ala Asp Leu Leu
 65 70 75
 Phe Ala Leu Ser Trp Lys Ser Asp Ala Pro Ala Thr Ser Glu Ile
 80 85 90
 Asn Glu Asp Ser Glu Asp His Tyr Ala Ile Met Pro Pro Leu Glu
 95 100 105
 Gln Phe Met Glu Ile Pro Ser Met Asp Arg Arg Glu Leu Phe Phe
 110 115 120
 Arg Asp Ile Glu Arg Gly Asp Ile Val Ile Gly Arg Ile Ser Ser
 125 130 135
 Ile Arg Glu Phe Gly Phe Phe Met Val Leu Ile Cys Leu Gly Ser
 140 145 150
 Gly Ile Met Arg Asp Ile Ala His Leu Glu Ile Thr Ala Leu Cys
 155 160 165
 Pro Leu Arg Asp Val Pro Ser His Ser Asn His Gly Asp Pro Leu
 170 175 180
 Ser Tyr Tyr Gln Thr Gly Asp Ile Ile Arg Ala Gly Ile Lys Asp
 185 190 195
 Ile Asp Arg Tyr His Glu Lys Leu Ala Val Ser Leu Tyr Ser Ser
 200 205 210
 Ser Leu Pro Pro His Leu Ser Gly Ile Lys Leu Gly Val Ile Ser
 215 220 225

Ser	Glu	Glu	Leu	Pro	Leu	Tyr	Tyr	Arg	Arg	Ser	Val	Glu	Leu	Asn	
				230					235					240	
Ser	Asn	Ser	Leu	Glu	Ser	Tyr	Glu	Asn	Val	Met	Gln	Ser	Ser	Leu	
				245					250					255	
Gly	Phe	Val	Asn	Pro	Gly	Val	Val	Glu	Phe	Leu	Leu	Glu	Lys	Leu	
				260					265					270	
Gly	Ile	Asp	Glu	Ser	Asn	Pro	Pro	Ser	Leu	Met	Arg	Gly	Leu	Gln	
				275					280					285	
Ser	Lys	Asn	Phe	Ser	Glu	Asp	Asp	Phe	Ala	Ser	Ala	Leu	Arg	Lys	
				290					295					300	
Lys	Gln	Ser	Ala	Ser	Trp	Ala	Leu	Lys	Cys	Val	Lys	Ile	Gly	Val	
				305					310					315	
Asp	Tyr	Phe	Lys	Val	Gly	Arg	His	Val	Asp	Ala	Met	Asn	Glu	Tyr	
				320					325					330	
Asn	Lys	Ala	Leu	Glu	Ile	Asp	Lys	Gln	Asn	Val	Glu	Ala	Leu	Val	
				335					340					345	
Ala	Arg	Gly	Ala	Leu	Tyr	Ala	Thr	Lys	Gly	Ser	Leu	Asn	Lys	Ala	
				350					355					360	
Ile	Glu	Asp	Phe	Glu	Leu	Ala	Leu	Glu	Asn	Cys	Pro	Thr	His	Arg	
				365					370					375	
Asn	Ala	Arg	Lys	Tyr	Leu	Cys	Gln	Thr	Leu	Val	Glu	Arg	Gly	Gly	
				380					385					390	
Gln	Leu	Glu	Glu	Glu	Glu	Lys	Phe	Leu	Asn	Ala	Glu	Ser	Tyr	Tyr	
				395					400					405	
Lys	Lys	Ala	Leu	Ala	Leu	Asp	Glu	Thr	Phe	Lys	Asp	Ala	Glu	Asp	
				410					415					420	
Ala	Leu	Gln	Lys	Leu	His	Lys	Tyr	Met	Gln	Lys	Ser	Leu	Glu	Leu	
				425					430					435	
Arg	Glu	Lys	Gln	Ala	Glu	Lys	Glu	Glu	Lys	Gln	Lys	Thr	Lys	Lys	
				440					445					450	
Ile	Glu	Thr	Ser	Ala	Glu	Lys	Leu	Arg	Lys	Leu	Leu	Lys	Glu	Glu	
				455					460					465	
Lys	Arg	Leu	Lys	Lys	Lys	Arg	Arg	Lys	Ser	Thr	Ser	Ser	Ser	Ser	
				470					475					480	
Val	Ser	Ser	Ala	Asp	Glu	Ser	Val	Ser	Ser	Ser	Ser	Ser	Ser	Ser	
				485					490					495	
Ser	Ser	Gly	His	Lys	Arg	His	Lys	Lys	His	Lys	Arg	Asn	Arg	Ser	
				500					505					510	
Glu	Ser	Ser	Arg	Ser	Ser	Arg	Arg	His	Ser	Ser	Arg	Ala	Ser	Ser	

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<210> 404

<211> 347

<212> PRT

<213> Homo Sapien

<400> 404

Met	Asp	Leu	Ala	Ala	Asn	Glu	Ile	Ser	Ile	Tyr	Asp	Lys	Leu	Ser
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Glu	Thr	Val	Asp	Leu	Val	Arg	Gln	Thr	Gly	His	Gln	Cys	Gly	Met
				20					25				30	
Ser	Glu	Lys	Ala	Ile	Glu	Lys	Phe	Ile	Arg	Gln	Leu	Leu	Glu	Lys
				35					40				45	
Asn	Glu	Pro	Gln	Arg	Pro	Pro	Pro	Gln	Tyr	Pro	Leu	Leu	Ile	Val
				50					55				60	
Val	Tyr	Lys	Val	Leu	Ala	Thr	Leu	Gly	Leu	Ile	Leu	Leu	Thr	Ala
				65					70				75	
Tyr	Phe	Val	Ile	Gln	Pro	Phe	Ser	Pro	Leu	Ala	Pro	Glu	Pro	Val
				80					85				90	
Leu	Ser	Gly	Ala	His	Thr	Trp	Arg	Ser	Leu	Ile	His	His	Ile	Arg
				95					100				105	
Leu	Met	Ser	Leu	Pro	Ile	Ala	Lys	Lys	Tyr	Met	Ser	Glu	Asn	Lys
				110					115				120	

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<210> 406

<211> 374

<212> PRT

<213> Homo Sapien

<400> 406

Met	Val	Leu	Trp	Glu	Ser	Pro	Arg	Gln	Cys	Ser	Ser	Trp	Thr	Leu	1	5	10	15
Cys	Glu	Gly	Phe	Cys	Trp	Leu	Leu	Leu	Leu	Pro	Val	Met	Leu	Leu	20	25	30	
Ile	Val	Ala	Arg	Pro	Val	Lys	Leu	Ala	Ala	Phe	Pro	Thr	Ser	Leu	35	40	45	
Ser	Asp	Cys	Gln	Thr	Pro	Thr	Gly	Trp	Asn	Cys	Ser	Gly	Tyr	Asp	50	55	60	
Asp	Arg	Glu	Asn	Asp	Leu	Phe	Leu	Cys	Asp	Thr	Asn	Thr	Cys	Lys	65	70	75	
Phe	Asp	Gly	Glu	Cys	Leu	Arg	Ile	Gly	Asp	Thr	Val	Thr	Cys	Val	80	85	90	
Cys	Gln	Phe	Lys	Cys	Asn	Asn	Asp	Tyr	Val	Pro	Val	Cys	Gly	Ser	95	100	105	
Asn	Gly	Glu	Ser	Tyr	Gln	Asn	Glu	Cys	Tyr	Leu	Arg	Gln	Ala	Ala	110	115	120	
Cys	Lys	Gln	Gln	Ser	Glu	Ile	Leu	Val	Val	Ser	Glu	Gly	Ser	Cys	125	130	135	
Ala	Thr	Asp	Ala	Gly	Ser	Gly	Ser	Gly	Asp	Gly	Val	His	Glu	Gly	140	145	150	
Ser	Gly	Glu	Thr	Ser	Gln	Lys	Glu	Thr	Ser	Thr	Cys	Asp	Ile	Cys	155	160	165	
Gln	Phe	Gly	Ala	Glu	Cys	Asp	Glu	Asp	Ala	Glu	Asp	Val	Trp	Cys	170	175	180	
Val	Cys	Asn	Ile	Asp	Cys	Ser	Gln	Thr	Asn	Phe	Asn	Pro	Leu	Cys	185	190	195	
Ala	Ser	Asp	Gly	Lys	Ser	Tyr	Asp	Asn	Ala	Cys	Gln	Ile	Lys	Glu	200	205	210	

Ala Ser Cys Gln Lys Gln Glu Lys Ile Glu Val Met Ser Leu Gly
215 220 225

Arg Cys Gln Asp Asn Thr Thr Thr Thr Thr Lys Ser Glu Asp Gly
230 235 240

His Tyr Ala Arg Thr Asp Tyr Ala Glu Asn Ala Asn Lys Leu Glu
245 250 255

Glu Ser Ala Arg Glu His His Ile Pro Cys Pro Glu His Tyr Asn
260 265 270

Gly Phe Cys Met His Gly Lys Cys Glu His Ser Ile Asn Met Gln
275 280 285

Glu Pro Ser Cys Arg Cys Asp Ala Gly Tyr Thr Gly Gln His Cys
290 295 300

Glu Lys Lys Asp Tyr Ser Val Leu Tyr Val Val Pro Gly Pro Val
305 310 315

Arg Phe Gln Tyr Val Leu Ile Ala Ala Val Ile Gly Thr Ile Gln
320 325 330

Ile Ala Val Ile Cys Val Val Val Leu Cys Ile Thr Arg Lys Cys
335 340 345

Pro Arg Ser Asn Arg Ile His Arg Gln Lys Gln Asn Thr Gly His
350 355 360

Tyr Ser Ser Asp Asn Thr Thr Arg Ala Ser Thr Arg Leu Ile
365 370

<210> 407
<211> 2609
<212> DNA
<213> Homo Sapien

<400> 407
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<210> 408
 <211> 448
 <212> PRT
 <213> Homo Sapien

<400> 408
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 35 40 45
 Cys Arg Thr Ile Pro Glu Ala Cys Arg Gly Asp Met Met Cys Val
 50 55 60
 Asn Gln Asn Gly Gly Tyr Leu Cys Ile Pro Arg Thr Asn Pro Val
 65 70 75
 Tyr Arg Gly Pro Tyr Ser Asn Pro Tyr Ser Thr Pro Tyr Ser Gly
 80 85 90
 Pro Tyr Pro Ala Ala Ala Pro Pro Leu Ser Ala Pro Asn Tyr Pro
 95 100 105
 Thr Ile Ser Arg Pro Leu Ile Cys Arg Phe Gly Tyr Gln Met Asp
 110 115 120

Glu Ser Asn Gln Cys Val Asp Val Asp Glu Cys Ala Thr Asp Ser	125	130	135
His Gln Cys Asn Pro Thr Gln Ile Cys Ile Asn Thr Glu Gly Gly	140	145	150
Tyr Thr Cys Ser Cys Thr Asp Gly Tyr Trp Leu Leu Glu Gly Gln	155	160	165
Cys Leu Asp Ile Asp Glu Cys Arg Tyr Gly Tyr Cys Gln Gln Leu	170	175	180
Cys Ala Asn Val Pro Gly Ser Tyr Ser Cys Thr Cys Asn Pro Gly	185	190	195
Phe Thr Leu Asn Glu Asp Gly Arg Ser Cys Gln Asp Val Asn Glu	200	205	210
Cys Ala Thr Glu Asn Pro Cys Val Gln Thr Cys Val Asn Thr Tyr	215	220	225
Gly Ser Leu Ile Cys Arg Cys Asp Pro Gly Tyr Glu Leu Glu Glu	230	235	240
Asp Gly Val His Cys Ser Asp Met Asp Glu Cys Ser Phe Ser Glu	245	250	255
Phe Leu Cys Gln His Glu Cys Val Asn Gln Pro Gly Thr Tyr Phe	260	265	270
Cys Ser Cys Pro Pro Gly Tyr Ile Leu Leu Asp Asp Asn Arg Ser	275	280	285
Cys Gln Asp Ile Asn Glu Cys Glu His Arg Asn His Thr Cys Asn	290	295	300
Leu Gln Gln Thr Cys Tyr Asn Leu Gln Gly Gly Phe Lys Cys Ile	305	310	315
Asp Pro Ile Arg Cys Glu Glu Pro Tyr Leu Arg Ile Ser Asp Asn	320	325	330
Arg Cys Met Cys Pro Ala Glu Asn Pro Gly Cys Arg Asp Gln Pro	335	340	345
Phe Thr Ile Leu Tyr Arg Asp Met Asp Val Val Ser Gly Arg Ser	350	355	360
Val Pro Ala Asp Ile Phe Gln Met Gln Ala Thr Thr Arg Tyr Pro	365	370	375
Gly Ala Tyr Tyr Ile Phe Gln Ile Lys Ser Gly Asn Glu Gly Arg	380	385	390
Glu Phe Tyr Met Arg Gln Thr Gly Pro Ile Ser Ala Thr Leu Val	395	400	405
Met Thr Arg Pro Ile Lys Gly Pro Arg Glu Ile Gln Leu Asp Leu			

410	415	420
Glu Met Ile Thr Val Asn Thr Val Ile Asn Phe Arg Gly Ser Ser		
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Val Ile Arg Leu Arg Ile Tyr Val Ser Gln Tyr Pro Phe		
440	445	

<210> 409
 <211> 2076
 <212> DNA
 <213> Homo Sapien

<400> 409
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aagtttgga tgccgtgaag gtgtttggaa atattattgg ataagaatag 1950
ctcaattatc ccaaataaat ggatgaagct ataatagttt tggggaaaag 2000
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<210> 410

<211> 476

<212> PRT

<213> Homo Sapien

<400> 410

Met	Val	Gly	Ala	Met	Trp	Lys	Val	Ile	Val	Ser	Leu	Val	Leu	Leu
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Met	Pro	Gly	Pro	Cys	Asp	Gly	Leu	Phe	Arg	Ser	Leu	Tyr	Arg	Ser
				20					25					30
Val	Ser	Met	Pro	Pro	Lys	Gly	Asp	Ser	Gly	Gln	Pro	Leu	Phe	Leu
				35					40					45
Thr	Pro	Tyr	Ile	Glu	Ala	Gly	Lys	Ile	Gln	Lys	Gly	Arg	Glu	Leu
				50					55					60

Ser	Leu	Val	Gly	Pro	Phe	Pro	Gly	Leu	Asn	Met	Lys	Ser	Tyr	Ala	
				65					70					75	
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Arg	Asp	Arg	Asp	Phe	Pro	Trp	Thr	Thr	Thr	Leu	Ser	Met	Leu	Tyr	
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Ile	Asp	Asn	Pro	Val	Gly	Thr	Gly	Phe	Ser	Phe	Thr	Asp	Asp	Thr	
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His	Gly	Tyr	Ala	Val	Asn	Glu	Asp	Asp	Val	Ala	Arg	Asp	Leu	Tyr	
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Ser	Ala	Leu	Ile	Gln	Phe	Phe	Gln	Ile	Phe	Pro	Glu	Tyr	Lys	Asn	
				185					190					195	
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Pro	Ala	Ile	Ala	His	Leu	Ile	His	Ser	Leu	Asn	Pro	Val	Arg	Glu	
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Val	Lys	Ile	Asn	Leu	Asn	Gly	Ile	Ala	Ile	Gly	Asp	Gly	Tyr	Ser	
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Asp	Pro	Glu	Ser	Ile	Ile	Gly	Gly	Tyr	Ala	Glu	Phe	Leu	Tyr	Gln	
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Cys	His	Glu	Cys	Ile	Glu	His	Ile	Arg	Lys	Gln	Asn	Trp	Phe	Glu	
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Val Ala Ala Ala Leu Thr Glu Arg Ser Leu Met Gly Met Asp Trp					
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Lys Gly Ser Gln Glu Tyr Lys Lys Ala Glu Lys Lys Val Trp Lys					
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Ile Phe Lys Ser Asp Ser Glu Val Ala Gly Tyr Ile Arg Gln Ala					
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Gly Asp Phe His Gln Val Ile Ile Arg Gly Gly Gly His Ile Leu					
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<212> DNA

<213> Homo Sapien

<400> 411

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 <212> PRT
 <213> Homo Sapien

<400> 412

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Cys	Thr	Val	Asp	Ile	Glu	Ser	Leu	Thr	Gly	Tyr	Arg	Thr	Tyr	Arg	35	40	45	
Cys	Ala	His	Pro	Leu	Ala	Thr	Leu	Phe	Lys	Ile	Leu	Ala	Ser	Phe	50	55	60	
Tyr	Ile	Ser	Leu	Val	Ile	Phe	Tyr	Gly	Leu	Ile	Cys	Met	Tyr	Thr	65	70	75	
Leu	Trp	Trp	Met	Leu	Arg	Arg	Ser	Leu	Lys	Lys	Tyr	Ser	Phe	Glu	80	85	90	
Ser	Ile	Arg	Glu	Glu	Ser	Ser	Tyr	Ser	Asp	Ile	Pro	Asp	Val	Lys	95	100	105	
Asn	Asp	Phe	Ala	Phe	Met	Leu	His	Leu	Ile	Asp	Gln	Tyr	Asp	Pro	110	115	120	
Leu	Tyr	Ser	Lys	Arg	Phe	Ala	Val	Phe	Leu	Ser	Glu	Val	Ser	Glu	125	130	135	
Asn	Lys	Leu	Arg	Gln	Leu	Asn	Leu	Asn	Asn	Glu	Trp	Thr	Leu	Asp	140	145	150	
Lys	Leu	Arg	Gln	Arg	Leu	Thr	Lys	Asn	Ala	Gln	Asp	Lys	Leu	Glu	155	160	165	
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Leu	Val	Glu	Leu	Glu	Val	Leu	Lys	Leu	Glu	Leu	Ile	Pro	Asp	Val	185	190	195	
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Ile	Lys	Glu	Ile	Pro	Leu	Trp	Ile	Tyr	Ser	Leu	Lys	Thr	Leu	Glu	245	250	255	
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Lys	Leu	Ile	Val	Leu	Asn	Ser	Leu	Lys	Lys	Met	Ala	Asn	Leu	Thr	
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Asn	Leu	Lys	Thr	Ile	Glu	Glu	Ile	Ile	Ser	Phe	Gln	His	Leu	His	
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Arg	Leu	Thr	Cys	Leu	Lys	Leu	Trp	Tyr	Asn	His	Ile	Ala	Tyr	Ile	
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Cys	Arg	Lys	Leu	Arg	Ala	Leu	His	Leu	Gly	Asn	Asn	Val	Leu	Gln	
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<400> 413

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 Leu Thr Pro Ala Thr Thr Thr Leu Asp Leu Ser Tyr Asn Leu Leu
 50 55 60
 Phe Gln Leu Gln Ser Ser Asp Phe His Ser Val Ser Lys Leu Arg
 65 70 75
 Val Leu Ile Leu Cys His Asn Arg Ile Gln Gln Leu Asp Leu Lys
 80 85 90
 Thr Phe Glu Phe Asn Lys Glu Leu Arg Tyr Leu Asp Leu Ser Asn
 95 100 105
 Asn Arg Leu Lys Ser Val Thr Trp Tyr Leu Leu Ala Gly Leu Arg
 110 115 120
 Tyr Leu Asp Leu Ser Phe Asn Asp Phe Asp Thr Met Pro Ile Cys
 125 130 135
 Glu Glu Ala Gly Asn Met Ser His Leu Glu Ile Leu Gly Leu Ser

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Met	Ala	Leu	Arg	Glu 470	Leu	Asn	Ile	Ala	Phe 475	Asn	Phe	Leu	Thr	Asp 480
Leu	Pro	Gly	Cys	Ser 485	His	Phe	Ser	Arg	Leu 490	Ser	Val	Leu	Asn	Ile 495
Glu	Met	Asn	Phe	Ile 500	Leu	Ser	Pro	Ser	Leu 505	Asp	Phe	Val	Gln	Ser 510
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Cys	Thr	Cys	Glu	Leu 530	Lys	Asn	Phe	Ile	Gln 535	Leu	Glu	Thr	Tyr	Ser 540
Glu	Val	Met	Met	Val 545	Gly	Trp	Ser	Asp	Ser 550	Tyr	Thr	Cys	Glu	Tyr 555
Pro	Leu	Asn	Leu	Arg 560	Gly	Thr	Arg	Leu	Lys 565	Asp	Val	His	Leu	His 570
Glu	Leu	Ser	Cys	Asn 575	Thr	Ala	Leu	Leu	Ile 580	Val	Thr	Ile	Val	Val 585
Ile	Met	Leu	Val	Leu 590	Gly	Leu	Ala	Val	Ala 595	Phe	Cys	Cys	Leu	His 600
Phe	Asp	Leu	Pro	Trp 605	Tyr	Leu	Arg	Met	Leu 610	Gly	Gln	Cys	Thr	Gln 615
Thr	Trp	His	Arg	Val 620	Arg	Lys	Thr	Thr	Gln 625	Glu	Gln	Leu	Lys	Arg 630
Asn	Val	Arg	Phe	His 635	Ala	Phe	Ile	Ser	Tyr 640	Ser	Glu	His	Asp	Ser 645
Leu	Trp	Val	Lys	Asn 650	Glu	Leu	Ile	Pro	Asn 655	Leu	Glu	Lys	Glu	Asp 660
Gly	Ser	Ile	Leu	Ile 665	Cys	Leu	Tyr	Glu	Ser 670	Tyr	Phe	Asp	Pro	Gly 675
Lys	Ser	Ile	Ser	Glu 680	Asn	Ile	Val	Ser	Phe 685	Ile	Glu	Lys	Ser	Tyr 690
Lys	Ser	Ile	Phe	Val 695	Leu	Ser	Pro	Asn	Phe 700	Val	Gln	Asn	Glu	Trp 705
Cys	His	Tyr	Glu	Phe 710	Tyr	Phe	Ala	His	His 715	Asn	Leu	Phe	His	Glu 720
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Lys Lys Ala Tyr Leu Glu Trp Pro Lys Asp Arg Arg Lys Cys Gly					
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	770		775		780
Ala Thr Arg Glu Met Tyr Glu Leu Gln Thr Phe Thr Glu Leu Asn					
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Cys	Arg	Asp	Glu	Lys	Cys	Val	Tyr	Glu	Thr	Trp	Val	Cys	Asp	Gly	
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Gln	Pro	Asp	Cys	Ala	Asp	Gly	Ser	Asp	Glu	Trp	Asp	Cys	Ser	Tyr	
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<212> PRT

<213> Homo Sapien

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Leu Arg Gln Val	Arg Leu Asp Pro Cys	Asp Leu Gln Pro Ile	Phe
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Asp Asp Met Leu	His Phe Leu Asn Pro	Glu Glu Leu Arg Val	Ile
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 aaccaccagc tcttcttcgt gggatttgcc cagggtgtggt gctcgggtccg 2150
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 cagaccctcc tcaatcacca cattgtgcct ctgctttggg ggtgcccctg 2500
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cc 2602

<210> 420

<211> 736

<212> PRT

<213> Homo Sapien

<400> 420

Met Asn Val Ala Leu Gln Glu Leu Gly Ala Gly Ser Asn Val Gly
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Phe Gln Lys Gly Thr Arg Gln Leu Leu Gly Ser Arg Thr Gln Leu
20 25 30

Glu Leu Val Leu Ala Gly Ala Ser Leu Leu Leu Ala Ala Leu Leu
35 40 45

Leu Gly Cys Leu Val Ala Leu Gly Val Gln Tyr His Arg Asp Pro
50 55 60

Ser His Ser Thr Cys Leu Thr Glu Ala Cys Ile Arg Val Ala Gly
65 70 75

Lys Ile Leu Glu Ser Leu Asp Arg Gly Val Ser Pro Cys Glu Asp
80 85 90

Phe Tyr Gln Phe Ser Cys Gly Gly Trp Ile Arg Arg Asn Pro Leu
95 100 105

Pro Asp Gly Arg Ser Arg Trp Asn Thr Phe Asn Ser Leu Trp Asp
110 115 120

Gln Asn Gln Ala Ile Leu Lys His Leu Leu Glu Asn Thr Thr Phe
125 130 135

Asn Ser Ser Ser Glu Ala Glu Gln Lys Thr Gln Arg Phe Tyr Leu
140 145 150

Ser Cys Leu Gln Val Glu Arg Ile Glu Glu Leu Gly Ala Gln Pro
155 160 165

Leu Arg Asp Leu Ile Glu Lys Ile Gly Gly Trp Asn Ile Thr Gly
170 175 180

Pro Trp Asp Gln Asp Asn Phe Met Glu Val Leu Lys Ala Val Ala
185 190 195

Gly Thr Tyr Arg Ala Thr Pro Phe Phe Thr Val Tyr Ile Ser Ala
200 205 210

Asp Ser Lys Ser Ser Asn Ser Asn Val Ile Gln Val Asp Gln Ser
215 220 225

Gly Leu Phe Leu Pro Ser Arg Asp Tyr Tyr Leu Asn Arg Thr Ala
230 235 240

530										535					540				
Glu	Ile	Val	Phe	Pro	Ala	Gly	Ile	Leu	Gln	Ala	Pro	Phe	Tyr	Ala					
				545					550					555					
Arg	Asn	His	Pro	Lys	Ala	Leu	Asn	Phe	Gly	Gly	Ile	Gly	Val	Val					
				560					565					570					
Met	Gly	His	Glu	Leu	Thr	His	Ala	Phe	Asp	Asp	Gln	Gly	Arg	Glu					
				575					580					585					
Tyr	Asp	Lys	Glu	Gly	Asn	Leu	Arg	Pro	Trp	Trp	Gln	Asn	Glu	Ser					
				590					595					600					
Leu	Ala	Ala	Phe	Arg	Asn	His	Thr	Ala	Cys	Met	Glu	Glu	Gln	Tyr					
				605					610					615					
Asn	Gln	Tyr	Gln	Val	Asn	Gly	Glu	Arg	Leu	Asn	Gly	Arg	Gln	Thr					
				620					625					630					
Leu	Gly	Glu	Asn	Ile	Thr	Asp	Asn	Gly	Gly	Leu	Lys	Ala	Ala	Tyr					
				635					640					645					
Asn	Ala	Tyr	Lys	Ala	Trp	Leu	Arg	Lys	His	Gly	Glu	Glu	Gln	Gln					
				650					655					660					
Leu	Pro	Ala	Val	Gly	Leu	Thr	Asn	His	Gln	Leu	Phe	Phe	Val	Gly					
				665					670					675					
Phe	Ala	Gln	Val	Trp	Cys	Ser	Val	Arg	Thr	Pro	Glu	Ser	Ser	His					
				680					685					690					
Glu	Gly	Leu	Val	Thr	Asp	Pro	His	Ser	Pro	Ala	Arg	Phe	Arg	Val					
				695					700					705					
Leu	Gly	Thr	Leu	Ser	Asn	Ser	Arg	Asp	Phe	Leu	Arg	His	Phe	Gly					
				710					715					720					
Cys	Pro	Val	Gly	Ser	Pro	Met	Asn	Pro	Gly	Gln	Leu	Cys	Glu	Val					
				725					730					735					

Trp

<210> 421
 <211> 1524
 <212> DNA
 <213> Homo Sapien

<400> 421
 ggcgccgcgt aggcccgga ggcgggccc ggcgggctgc gagcgctgc 50
 cccatgcgcc gccgcctctc cgcacgatgt tcccctcgcg gaggaaagcg 100
 gcgcagctgc cctgggagga cggcaggtcc gggttgctct ccggcggcct 150
 ccctcggaag tgttcctct tccacctgtt cgtggcctgc ctctcgtgg 200

gctttttctc cctactcttg ctgcagctca gctgctctgg ggacgtggcc 250
 cgggcagtca ggggacaagg gcaggagacc tcgggccctc cccgtgcctg 300
 cccccagag ccgccccctg agcactggga agaagacgca tcctggggcc 350
 cccaccgcct ggcagtgtct gtgcccttcc gcgaacgctt cgaggagctc 400
 ctggtcttcg tgccccacat gcgcgccttc ctgagcagga agaagatccg 450
 gcaccacatc tacgtgtctc accaggtgga ccacttcagg ttcaaccggg 500
 cagcgctcat caacgtgggc ttcttgaga gcagcaacag cacggactac 550
 attgccatgc acgacgttga cctgtctcct ctcaacgagg agctggacta 600
 tggctttcct gaggtctggc ccttcacgt ggcctccccg gagctccacc 650
 ctctctacca ctacaagacc tatgtcggcg gcctcctgct gctctccaag 700
 cagcactacc ggctgtgcaa tgggatgtcc aaccgcttct ggggctgggg 750
 ccgcgaggac gacgagttct accggcgcat taaggagct gggctccagc 800
 ttttccgccc ctcggaatc acaactgggt acaagacatt tcgccacctg 850
 catgaccag cctggcgga gagggaccag aagcgcatcg cagctcaaaa 900
 acaggagcag ttcaaggtgg acaggaggagg aggcctgaac actgtgaagt 950
 accatgtggc ttcccgact gccctgtctg tgggcggggc cccctgcact 1000
 gtctcaaca tcattgttga ctgtgacaag accgccacac cctggtgcac 1050
 attcagctga gctggatgga cagtgaggaa gcctgtacct acaggccata 1100
 ttgctcaggc tcaggacaag gcctcaggtc gtgggcccag ctctgacagg 1150
 atgtggagtg gccaggacca agacagcaag ctacgcaatt gcagccacc 1200
 ggccgccaag gcaggcttgg gctgggcccag gacacgtggg gtgcctggga 1250
 cgctgcttgc catgcacagt gatcagagag aggcctgggt gtgtcctgtc 1300
 cgggaccccc cctgccttcc tgctcaccct actctgacct ccttcacgtg 1350
 cccaggcctg tgggtagtgg ggagggtga acaggacaac ctctcatcac 1400
 cctactctga cctccttcac gtgcccaggc ctgtgggtag tggggagggc 1450
 tgaacaggac aacctctcat ccccccaaa aaaaaaaaaa aaaaaaaaaa 1500
 aaaaaaaaaa aaaaaaaaaa aaaa 1524

<210> 422

<211> 327

<212> PRT

<213> Homo Sapien

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647

Gly Leu Asn Thr Val Lys Tyr His Val Ala Ser Arg Thr Ala Leu
290 295 300

Ser Val Gly Gly Ala Pro Cys Thr Val Leu Asn Ile Met Leu Asp
305 310 315

Cys Asp Lys Thr Ala Thr Pro Trp Cys Thr Phe Ser
320 325

<210> 423

<211> 859

<212> DNA

<213> Homo Sapien

<400> 423

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agcataccag atctcaccag agagtcgcag acactatgct gcctcccatg 100
gccctgcccc gtgtgtcctg gatgctgctt tcctgcctca ttctcctgtg 150
tcagggttcaa ggtgaagaaa ccagagaagga actgccctct ccacggatca 200
gctgtcccaa aggtctcaag gcctatggct cccctgcta tgccttgttt 250
ttgtcaccaa aatcctggat ggatgcagat ctggcttgcc agaagcggcc 300
ctctggaaaa ctggtgtctg tgctcagtgg ggctgagggga tccttcgtgt 350
cctccctggt gaggagcatt agtaacagct actcatacat ctggattggg 400
ctccatgacc ccacacaggg ctctgagcct gatggagatg gatgggagtg 450
gagtagcact gatgtgatga attactttgc atgggagaaa aatccctcca 500
ccatcttaaa ccttggccac tgtgggagcc tgtcaagaag cacaggattt 550
ctgaagtgga aagattataa ctgtgatgca aagttaccct atgtctgcaa 600
gttcaaggac tagggcaggt gggaagtcag cagcctcagc ttggcgtgca 650
gctcatcatg gacatgagac cagtgtgaag actcaccctg gaagagaata 700
ttctcccaa actgccctac ctgactacct tgtcatgac ctccttcttt 750
ttcctttttc ttcaccttca tttcaggctt ttctctgtct tccatgtctt 800
gagatctcag agaataataa taaaaatggt actttataaa aaaaaaaaaa 850
aaaaaaaaa 859

<210> 424

<211> 175

<212> PRT

<213> Homo Sapien

<400> 424

Met Leu Pro Pro Met Ala Leu Pro Ser Val Ser Trp Met Leu Leu

1	5	10	15
Ser Cys Leu Ile Leu Leu Cys Gln Val Gln Gly Glu Glu Thr Gln	20	25	30
Lys Glu Leu Pro Ser Pro Arg Ile Ser Cys Pro Lys Gly Ser Lys	35	40	45
Ala Tyr Gly Ser Pro Cys Tyr Ala Leu Phe Leu Ser Pro Lys Ser	50	55	60
Trp Met Asp Ala Asp Leu Ala Cys Gln Lys Arg Pro Ser Gly Lys	65	70	75
Leu Val Ser Val Leu Ser Gly Ala Glu Gly Ser Phe Val Ser Ser	80	85	90
Leu Val Arg Ser Ile Ser Asn Ser Tyr Ser Tyr Ile Trp Ile Gly	95	100	105
Leu His Asp Pro Thr Gln Gly Ser Glu Pro Asp Gly Asp Gly Trp	110	115	120
Glu Trp Ser Ser Thr Asp Val Met Asn Tyr Phe Ala Trp Glu Lys	125	130	135
Asn Pro Ser Thr Ile Leu Asn Pro Gly His Cys Gly Ser Leu Ser	140	145	150
Arg Ser Thr Gly Phe Leu Lys Trp Lys Asp Tyr Asn Cys Asp Ala	155	160	165
Lys Leu Pro Tyr Val Cys Lys Phe Lys Asp	170	175	

<210> 425
 <211> 1227
 <212> DNA
 <213> Homo Sapien

<400> 425
 cggacgcgtg ggccgccacc tccggaacaa gccatggtgg cggcgacggt 50
 ggcagcggcg tggctgctcc tgtgggctgc ggctgcgcg cagcaggagc 100
 aggacttcta cgacttcaag gcggtcaaca tccggggcaa actggtgtcg 150
 ctggagaagt accgcggatc ggtgtccctg gtggtgaatg tggccagcga 200
 gtgcggcttc acagaccagc actaccgagc cctgcagcag ctgcagcgag 250
 acctggggccc ccaccacttt aacgtgctcg ccttcccctg caaccagttt 300
 ggccaacagg agcctgacag caacaaggag attgagagct ttgcccgccg 350
 cacctacagt gtctcattcc ccatgttttag caagattgca gtcaccggtg 400
 ctggtgcccc tctgccttc aagtacctgg cccagacttc tgggaaggag 450

Arg	Thr	Tyr	Ser	Val	Ser	Phe	Pro	Met	Phe	Ser	Lys	Ile	Ala	Val
				110					115					120
Thr	Gly	Thr	Gly	Ala	His	Pro	Ala	Phe	Lys	Tyr	Leu	Ala	Gln	Thr
				125					130					135
Ser	Gly	Lys	Glu	Pro	Thr	Trp	Asn	Phe	Trp	Lys	Tyr	Leu	Val	Ala
				140					145					150
Pro	Asp	Gly	Lys	Val	Val	Gly	Ala	Trp	Asp	Pro	Thr	Val	Ser	Val
				155					160					165
Glu	Glu	Val	Arg	Pro	Gln	Ile	Thr	Ala	Leu	Val	Arg	Lys	Leu	Ile
				170					175					180
Leu	Leu	Lys	Arg	Glu	Asp	Leu								
				185										

<210> 427
 <211> 678
 <212> DNA
 <213> Homo Sapien

<400> 427
 cagttctgaa atcaatggag ttaatttagg gaatacaaac cagccatggg 50
 ggtggagatt gcctttgcct cagtgattct cacctgcctc tcccttctgg 100
 cagcaggagt ctcccagggt gttcttctcc agccagttcc aactcaggag 150
 acagggtccca aggccatggg agatctctcc tgtggctttg ccggccactc 200
 atgagagtgt ttttgtgtaa agtatttttt agaatactgt tgacttcttc 250
 atgatttaat aaccatcctt tgcgaagttt tatgaggctt taggggaatg 300
 tcaaccctca aatttttggt atactagatg gcttccattt acccaccact 350
 attttaagggt ccctttatct ttaggttcaa gggttcatttg acttgagaaa 400
 gtgcccttct gcagcttcat tgattttggt tatcttctact attaattgta 450
 acgattaaaa aagaataaga gcacgcagac ctctaggaga atattttatc 500
 cctgggtgcc cctgacacat ttatgtagtg atcccacaaa tgtgattggt 550
 aatttaaagt ttattctaatt attagtagat tcagttgtga tgtaatatga 600
 ataaccagaa tctatttctt aaaagttttg agtatatttt tcaactagat 650
 atttgtagat aaagactgaa tagtgatg 678

<210> 428
 <211> 52
 <212> PRT
 <213> Homo Sapien

<400> 428

Met	Gly	Val	Glu	Ile	Ala	Phe	Ala	Ser	Val	Ile	Leu	Thr	Cys	Leu
1				5					10					15
Ser	Leu	Leu	Ala	Ala	Gly	Val	Ser	Gln	Val	Val	Leu	Leu	Gln	Pro
			20						25					30
Val	Pro	Thr	Gln	Glu	Thr	Gly	Pro	Lys	Ala	Met	Gly	Asp	Leu	Ser
			35						40					45
Cys	Gly	Phe	Ala	Gly	His	Ser								
				50										

<210> 429
 <211> 773
 <212> DNA
 <213> Homo Sapien

<400> 429
 ccaaagtgat catttgaaaa agagatatcc acatcttcaa gcccatataa 50
 aggatagaag ctgcacaggg cagctttact tactccagca ccttcctctc 100
 ccaggcaaat ggtgctgacc atctttggga tacaatctca tggatacgag 150
 gtttttaaca tcatcagccc aagcaacaat ggtggcaatg ttcaggagac 200
 agtgacaatt gataatgaaa aaaataccgc catcgttaac atccatgcag 250
 gatcatgctc ttctaccaca atttttgact ataaacatgg ctacattgca 300
 tccagggtgc tctcccgaag agcctgcttt atcctgaaga tggaccatca 350
 gaacatccct cctctgaaca atctccaatg gtacatctat gagaaacagg 400
 ctctggacaa catgttctcc aacaaatata cctgggtcaa gtacaaccct 450
 ctggagtctc tgatcaaaga cgtggattgg ttctgcttg ggtcaccat 500
 tgagaaactc tgcaaacata tccctttgta taagggggaa gtggttgaaa 550
 acacacataa tgtcgggtgct ggaggctgtg caaaggctgg gtcctggggc 600
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 ctcttgtttt atcttttcaa agaaatacat ccttggttta cactcaaaag 700
 tcaaattaaa ttctttccca atgcccacac taattttgag attcagtcag 750
 aaaatataaa tgctgtattt ata 773

<210> 430
 <211> 176
 <212> PRT
 <213> Homo Sapien

<400> 430
 Met Val Leu Thr Ile Phe Gly Ile Gln Ser His Gly Tyr Glu Val
 1 5 10 15

Phe	Asn	Ile	Ile	Ser	Pro	Ser	Asn	Asn	Gly	Gly	Asn	Val	Gln	Glu	20	25	30
Thr	Val	Thr	Ile	Asp	Asn	Glu	Lys	Asn	Thr	Ala	Ile	Val	Asn	Ile	35	40	45
His	Ala	Gly	Ser	Cys	Ser	Ser	Thr	Thr	Ile	Phe	Asp	Tyr	Lys	His	50	55	60
Gly	Tyr	Ile	Ala	Ser	Arg	Val	Leu	Ser	Arg	Arg	Ala	Cys	Phe	Ile	65	70	75
Leu	Lys	Met	Asp	His	Gln	Asn	Ile	Pro	Pro	Leu	Asn	Asn	Leu	Gln	80	85	90
Trp	Tyr	Ile	Tyr	Glu	Lys	Gln	Ala	Leu	Asp	Asn	Met	Phe	Ser	Asn	95	100	105
Lys	Tyr	Thr	Trp	Val	Lys	Tyr	Asn	Pro	Leu	Glu	Ser	Leu	Ile	Lys	110	115	120
Asp	Val	Asp	Trp	Phe	Leu	Leu	Gly	Ser	Pro	Ile	Glu	Lys	Leu	Cys	125	130	135
Lys	His	Ile	Pro	Leu	Tyr	Lys	Gly	Glu	Val	Val	Glu	Asn	Thr	His	140	145	150
Asn	Val	Gly	Ala	Gly	Gly	Cys	Ala	Lys	Ala	Gly	Leu	Leu	Gly	Ile	155	160	165
Leu	Gly	Ile	Ser	Ile	Cys	Ala	Asp	Ile	His	Val					170	175	

<210> 431
 <211> 683
 <212> DNA
 <213> Homo Sapien

<400> 431
 gcgtggggat gtctaggagc tcgaaggtgg tgctgggcct ctcggtgctg 50
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 gcagaggctt cgtgacggag ttatcagaga cattgagagg caaattcgga 150
 aaaaagaaaa cattcgtctt ttgggagaac agattatttt gactgagcaa 200
 cttgaagcag aaagagagaa gatgttattg gcaaaaaggat ctcaaaaatc 250
 atgacttgaa tgtgaaatat ctgttgga gacaacacga gtttgtgtgt 300
 gtgtgttgat ggagagtagc ttagtagtat cttcatcttt ttttttggtc 350
 actgtccttt taaacttgat caaataaagg acagtgggtc atataagtta 400
 ctgctttcag ggtcccttat atctgaataa aggagtgtgg gcagacactt 450
 tttggaagag tctgtctggg tgatcctggt agaagcccca ttagggtcac 500

tgtccagtgc ttagggttgt tactgagaag cactgccgag cttgtgagaa 550
 ggaagggatg gatagtagca tccacctgag tagtctgac agtcggcatg 600
 atgacgaagc caccagaaca tcgacctcag aaggactgga ggaaggtgaa 650
 gtggaggag agacgctcct gatcgtcgaa tcc 683

<210> 432

<211> 81

<212> PRT

<213> Homo Sapien

<400> 432

Met	Ser	Arg	Ser	Ser	Lys	Val	Val	Leu	Gly	Leu	Ser	Val	Leu	Leu
1				5					10				15	
Thr	Ala	Ala	Thr	Val	Ala	Gly	Val	His	Val	Lys	Gln	Gln	Trp	Asp
				20					25				30	
Gln	Gln	Arg	Leu	Arg	Asp	Gly	Val	Ile	Arg	Asp	Ile	Glu	Arg	Gln
				35					40				45	
Ile	Arg	Lys	Lys	Glu	Asn	Ile	Arg	Leu	Leu	Gly	Glu	Gln	Ile	Ile
				50					55				60	
Leu	Thr	Glu	Gln	Leu	Glu	Ala	Glu	Arg	Glu	Lys	Met	Leu	Leu	Ala
				65				70					75	
Lys	Gly	Ser	Gln	Lys	Ser									
				80										

<210> 433

<211> 3608

<212> DNA

<213> Homo Sapien

<400> 433

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gaccatgtgg gaaatacgtg cgcggggaat gactccctat cctgggggtcc 2550
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aaggatatat taataaaaca ttacttattt catttcactt atcttgcata 3400

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 aatatttgta aaatgaaatg ccatatttga cttggcttct ggtcttgatg 3550
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 aaatagga 3608

<210> 434
 <211> 999
 <212> PRT
 <213> Homo Sapien

<400> 434
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 20 25 30
 Pro Tyr Pro Leu Phe Pro Gly Pro Phe Pro Gly Ser Leu Gln Thr
 35 40 45
 Asp His Thr Pro Leu Leu Ser Leu Pro His Ala Ser Gly Tyr Gln
 50 55 60
 Pro Ala Leu Met Phe Ser Pro Thr Gln Pro Gly Arg Pro His Thr
 65 70 75
 Gly Asn Val Ala Ile Pro Gln Val Thr Ser Val Glu Ser Lys Pro
 80 85 90
 Leu Pro Pro Leu Ala Phe Lys His Thr Val Gly His Ile Ile Leu
 95 100 105
 Ser Glu His Lys Gly Val Lys Phe Asn Cys Ser Ile Asn Val Pro
 110 115 120
 Asn Ile Tyr Gln Asp Thr Thr Ile Ser Trp Trp Lys Asp Gly Lys
 125 130 135
 Glu Leu Leu Gly Gly His His Arg Ile Thr Gln Phe Tyr Pro Asp
 140 145 150
 Asp Glu Val Thr Ala Ile Ile Ala Ser Phe Ser Ile Thr Ser Val
 155 160 165
 Gln Arg Ser Asp Asn Gly Ser Tyr Ile Cys Lys Met Lys Ile Asn
 170 175 180
 Asn Glu Glu Ile Val Ser Asp Pro Ile Tyr Ile Glu Val Gln Gly
 185 190 195
 Leu Pro His Phe Thr Lys Gln Pro Glu Ser Met Asn Val Thr Arg
 200 205 210

Asn	Thr	Ala	Phe	Asn	Leu	Thr	Cys	Gln	Ala	Val	Gly	Pro	Pro	Glu	
				215					220					225	
Pro	Val	Asn	Ile	Phe	Trp	Val	Gln	Asn	Ser	Ser	Arg	Val	Asn	Glu	
				230					235					240	
Gln	Pro	Glu	Lys	Ser	Pro	Gly	Val	Leu	Thr	Val	Pro	Gly	Leu	Thr	
				245					250					255	
Glu	Met	Ala	Val	Phe	Ser	Cys	Glu	Ala	His	Asn	Asp	Lys	Gly	Leu	
				260					265					270	
Thr	Val	Ser	Gln	Gly	Val	Gln	Ile	Asn	Ile	Lys	Ala	Ile	Pro	Ser	
				275					280					285	
Pro	Pro	Thr	Glu	Val	Ser	Ile	Arg	Asn	Ser	Thr	Ala	His	Ser	Ile	
				290					295					300	
Leu	Ile	Ser	Trp	Val	Pro	Gly	Phe	Asp	Gly	Tyr	Ser	Pro	Phe	Arg	
				305					310					315	
Asn	Cys	Ser	Ile	Gln	Val	Lys	Glu	Ala	Asp	Pro	Leu	Gly	Asn	Gly	
				320					325					330	
Ser	Val	Met	Ile	Phe	Asn	Thr	Ser	Ala	Leu	Pro	His	Leu	Tyr	Gln	
				335					340					345	
Ile	Lys	Gln	Leu	Gln	Ala	Leu	Ala	Asn	Tyr	Ser	Ile	Gly	Val	Ser	
				350					355					360	
Cys	Met	Asn	Glu	Ile	Gly	Trp	Ser	Ala	Val	Ser	Pro	Trp	Ile	Leu	
				365					370					375	
Ala	Ser	Thr	Thr	Glu	Gly	Ala	Pro	Ser	Val	Ala	Pro	Leu	Asn	Val	
				380					385					390	
Thr	Val	Phe	Leu	Asn	Glu	Ser	Ser	Asp	Asn	Val	Asp	Ile	Arg	Trp	
				395					400					405	
Met	Lys	Pro	Pro	Thr	Lys	Gln	Gln	Asp	Gly	Glu	Leu	Val	Gly	Tyr	
				410					415					420	
Arg	Ile	Ser	His	Val	Trp	Gln	Ser	Ala	Gly	Ile	Ser	Lys	Glu	Leu	
				425					430					435	
Leu	Glu	Glu	Val	Gly	Gln	Asn	Gly	Ser	Arg	Ala	Arg	Ile	Ser	Val	
				440					445					450	
Gln	Val	His	Asn	Ala	Thr	Cys	Thr	Val	Arg	Ile	Ala	Ala	Val	Thr	
				455					460					465	
Arg	Gly	Gly	Val	Gly	Pro	Phe	Ser	Asp	Pro	Val	Lys	Ile	Phe	Ile	
				470					475					480	
Pro	Ala	His	Gly	Trp	Val	Asp	Tyr	Ala	Pro	Ser	Ser	Thr	Pro	Ala	
				485					490					495	
Pro	Gly	Asn	Ala	Asp	Pro	Val	Leu	Ile	Ile	Phe	Gly	Cys	Phe	Cys	

500	505	510
Gly Phe Ile Leu Ile Gly Leu Ile Leu	Tyr Ile Ser Leu Ala Ile	
515	520	525
Arg Lys Arg Val Gln Glu Thr Lys Phe	Gly Asn Ala Phe Thr Glu	
530	535	540
Glu Asp Ser Glu Leu Val Val Asn Tyr	Ile Ala Lys Lys Ser Phe	
545	550	555
Cys Arg Arg Ala Ile Glu Leu Thr Leu	His Ser Leu Gly Val Ser	
560	565	570
Glu Glu Leu Gln Asn Lys Leu Glu Asp	Val Val Ile Asp Arg Asn	
575	580	585
Leu Leu Ile Leu Gly Lys Ile Leu Gly	Glu Gly Glu Phe Gly Ser	
590	595	600
Val Met Glu Gly Asn Leu Lys Gln Glu	Asp Gly Thr Ser Leu Lys	
605	610	615
Val Ala Val Lys Thr Met Lys Leu Asp	Asn Ser Ser His Arg Glu	
620	625	630
Ile Glu Glu Phe Leu Ser Glu Ala Ala	Cys Met Lys Asp Phe Ser	
635	640	645
His Pro Asn Val Ile Arg Leu Leu Gly	Val Cys Ile Glu Met Ser	
650	655	660
Ser Gln Gly Ile Pro Lys Pro Met Val	Ile Leu Pro Phe Met Lys	
665	670	675
Tyr Gly Asp Leu His Thr Tyr Leu Leu	Tyr Ser Arg Leu Glu Thr	
680	685	690
Gly Pro Lys His Ile Pro Leu Gln Thr	Leu Leu Lys Phe Met Val	
695	700	705
Asp Ile Ala Leu Gly Met Glu Tyr Leu	Ser Asn Arg Asn Phe Leu	
710	715	720
His Arg Asp Leu Ala Ala Arg Asn Cys	Met Leu Arg Asp Asp Met	
725	730	735
Thr Val Cys Val Ala Asp Phe Gly Leu	Ser Lys Lys Ile Tyr Ser	
740	745	750
Gly Asp Tyr Tyr Arg Gln Gly Arg Ile	Ala Lys Met Pro Val Lys	
755	760	765
Trp Ile Ala Ile Glu Ser Leu Ala Asp	Arg Val Tyr Thr Ser Lys	
770	775	780
Ser Asp Val Trp Ala Phe Gly Val Thr	Met Trp Glu Ile Arg Thr	
785	790	795

Arg Gly Met Thr Pro Tyr Pro Gly Val Gln Asn His Glu Met Tyr
800 805 810

Asp Tyr Leu Leu His Gly His Arg Leu Lys Gln Pro Glu Asp Cys
815 820 825

Leu Asp Glu Leu Tyr Glu Ile Met Tyr Ser Cys Trp Arg Thr Asp
830 835 840

Pro Leu Asp Arg Pro Thr Phe Ser Val Leu Arg Leu Gln Leu Glu
845 850 855

Lys Leu Leu Glu Ser Leu Pro Asp Val Arg Asn Gln Ala Asp Val
860 865 870

Ile Tyr Val Asn Thr Gln Leu Leu Glu Ser Ser Glu Gly Leu Ala
875 880 885

Gln Gly Pro Thr Leu Ala Pro Leu Asp Leu Asn Ile Asp Pro Asp
890 895 900

Ser Ile Ile Ala Ser Cys Thr Pro Arg Ala Ala Ile Ser Val Val
905 910 915

Thr Ala Glu Val His Asp Ser Lys Pro His Glu Gly Arg Tyr Ile
920 925 930

Leu Asn Gly Gly Ser Glu Glu Trp Glu Asp Leu Thr Ser Ala Pro
935 940 945

Ser Ala Ala Val Thr Ala Glu Lys Asn Ser Val Leu Pro Gly Glu
950 955 960

Arg Leu Val Arg Asn Gly Val Ser Trp Ser His Ser Ser Met Leu
965 970 975

Pro Leu Gly Ser Ser Leu Pro Asp Glu Leu Leu Phe Ala Asp Asp
980 985 990

Ser Ser Glu Gly Ser Glu Val Leu Met
995

<210> 435
<211> 1869
<212> DNA
<213> Homo Sapien

<400> 435
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ccagtactgg atgtgacagc aggcagagga gcacttagca gcttattcag 100
tgtccgattc tgattccggc aaggatccaa gcatggaatg ctgccgtcgg 150
gcaactcctg gcacactgct cctctttctg gctttcctgc tcctgagttc 200
caggaccgca cgctccgagg aggaccggga cggcctatgg gatgcctggg 250

gcccatggag	tgaatgtca	cgcacctgcg	ggggaggggc	ctcctactct	300
ctgaggcgct	gcctgagcag	caagagctgt	gaaggaagaa	atatccgata	350
cagaacatgc	agtaatgtgg	actgcccacc	agaagcaggt	gatttccgag	400
ctcagcaatg	ctcagctcat	aatgatgtca	agcaccatgg	ccagttttat	450
gaatggcttc	ctgtgtctaa	tgaccctgac	aacccatggt	cactcaagtg	500
ccaagccaaa	ggaacaaccc	tggttggtga	actagcacct	aaggtccttag	550
atggtagcgc	ttgctataca	gaatctttgg	atatgtgcat	cagtggttta	600
tgccaaattg	ttggctgcga	tcaccagctg	ggaagcaccg	tcaaggaaga	650
taactgtggg	gtctgcaacg	gagatgggtc	cacctgccgg	ctgggccgag	700
ggcagtataa	atcccagctc	tccgcaacca	aatcggatga	tactgtgggt	750
gcacttcctt	atggaagtag	acatatcgc	cttgtcttaa	aaggtcctga	800
tcacttatat	ctggaaacca	aaacctcca	ggggactaaa	ggtgaaaaca	850
gtctcagctc	cacaggaact	ttccttgtgg	acaattctag	tgtggacttc	900
cagaaatttc	cagacaaaga	gatactgaga	atggctggac	cactcacagc	950
agatttcatt	gtcaagattc	gtaactcggg	ctccgctgac	agtacagtcc	1000
agttcatctt	ctatcaaccc	atcatccacc	gatggaggga	gacggatttc	1050
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gtgctacgat	ctgaggagca	accgtgtggg	tgctgaccaa	tactgtcact	1150
attaccaga	gaacatcaaa	cccaaacc	agcttcagga	gtgcaacttg	1200
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<210> 436
 <211> 525
 <212> PRT
 <213> Homo Sapien

<400> 436
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 20 25 30
 Asp Arg Asp Gly Leu Trp Asp Ala Trp Gly Pro Trp Ser Glu Cys
 35 40 45
 Ser Arg Thr Cys Gly Gly Gly Ala Ser Tyr Ser Leu Arg Arg Cys
 50 55 60
 Leu Ser Ser Lys Ser Cys Glu Gly Arg Asn Ile Arg Tyr Arg Thr
 65 70 75
 Cys Ser Asn Val Asp Cys Pro Pro Glu Ala Gly Asp Phe Arg Ala
 80 85 90
 Gln Gln Cys Ser Ala His Asn Asp Val Lys His His Gly Gln Phe
 95 100 105
 Tyr Glu Trp Leu Pro Val Ser Asn Asp Pro Asp Asn Pro Cys Ser
 110 115 120
 Leu Lys Cys Gln Ala Lys Gly Thr Thr Leu Val Val Glu Leu Ala
 125 130 135
 Pro Lys Val Leu Asp Gly Thr Arg Cys Tyr Thr Glu Ser Leu Asp
 140 145 150
 Met Cys Ile Ser Gly Leu Cys Gln Ile Val Gly Cys Asp His Gln
 155 160 165
 Leu Gly Ser Thr Val Lys Glu Asp Asn Cys Gly Val Cys Asn Gly
 170 175 180
 Asp Gly Ser Thr Cys Arg Leu Val Arg Gly Gln Tyr Lys Ser Gln
 185 190 195
 Leu Ser Ala Thr Lys Ser Asp Asp Thr Val Val Ala Leu Pro Tyr
 200 205 210
 Gly Ser Arg His Ile Arg Leu Val Leu Lys Gly Pro Asp His Leu
 215 220 225

Tyr	Leu	Glu	Thr	Lys 230	Thr	Leu	Gln	Gly	Thr 235	Lys	Gly	Glu	Asn	Ser 240
Leu	Ser	Ser	Thr	Gly 245	Thr	Phe	Leu	Val	Asp 250	Asn	Ser	Ser	Val	Asp 255
Phe	Gln	Lys	Phe	Pro 260	Asp	Lys	Glu	Ile	Leu 265	Arg	Met	Ala	Gly	Pro 270
Leu	Thr	Ala	Asp	Phe 275	Ile	Val	Lys	Ile	Arg 280	Asn	Ser	Gly	Ser	Ala 285
Asp	Ser	Thr	Val	Gln 290	Phe	Ile	Phe	Tyr	Gln 295	Pro	Ile	Ile	His	Arg 300
Trp	Arg	Glu	Thr	Asp 305	Phe	Phe	Pro	Cys	Ser 310	Ala	Thr	Cys	Gly	Gly 315
Gly	Tyr	Gln	Leu	Thr 320	Ser	Ala	Glu	Cys	Tyr 325	Asp	Leu	Arg	Ser	Asn 330
Arg	Val	Val	Ala	Asp 335	Gln	Tyr	Cys	His	Tyr 340	Tyr	Pro	Glu	Asn	Ile 345
Lys	Pro	Lys	Pro	Lys 350	Leu	Gln	Glu	Cys	Asn 355	Leu	Asp	Pro	Cys	Pro 360
Ala	Ser	Asp	Gly	Tyr 365	Lys	Gln	Ile	Met	Pro 370	Tyr	Asp	Leu	Tyr	His 375
Pro	Leu	Pro	Arg	Trp 380	Glu	Ala	Thr	Pro	Trp 385	Thr	Ala	Cys	Ser	Ser 390
Ser	Cys	Gly	Gly	Gly 395	Ile	Gln	Ser	Arg	Ala 400	Val	Ser	Cys	Val	Glu 405
Glu	Asp	Ile	Gln	Gly 410	His	Val	Thr	Ser	Val 415	Glu	Glu	Trp	Lys	Cys 420
Met	Tyr	Thr	Pro	Lys 425	Met	Pro	Ile	Ala	Gln 430	Pro	Cys	Asn	Ile	Phe 435
Asp	Cys	Pro	Lys	Trp 440	Leu	Ala	Gln	Glu	Trp 445	Ser	Pro	Cys	Thr	Val 450
Thr	Cys	Gly	Gln	Gly 455	Leu	Arg	Tyr	Arg	Val 460	Val	Leu	Cys	Ile	Asp 465
His	Arg	Gly	Met	His 470	Thr	Gly	Gly	Cys	Ser 475	Pro	Lys	Thr	Lys	Pro 480
His	Ile	Lys	Glu	Glu 485	Cys	Ile	Val	Pro	Thr 490	Pro	Cys	Tyr	Lys	Pro 495
Lys	Glu	Lys	Leu	Pro 500	Val	Glu	Ala	Lys	Leu 505	Pro	Trp	Phe	Lys	Gln 510
Ala	Gln	Glu	Leu	Glu	Glu	Gly	Ala	Ala	Val	Ser	Glu	Glu	Pro	Ser

<210> 437
 <211> 1158
 <212> DNA
 <213> Homo Sapien

<400> 437
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 ctcaacttaag tctcaggcct gtcagcagct cctgtggaca ttgccatccc 150
 ctctggtagc cttcagagca aacaggacaa cctatgttat ggatgtttcc 200
 accaaccagg gtagtggcat ggagcacctg aaccatctgt gcttctgtga 250
 tctctatgac agagccactt ctccacctct gaaatgttcc ctgctctgaa 300
 atctggcatg agatggcaca ggtgaccacg cagaagccac cagaatcttg 350
 cctgccctat tctcctccc aagtctgttc tcttattgtc aacctcagca 400
 caacaggctg gcgccaatgg cattacagag aaagcaatct gtgtggctag 450
 tgggcagatt accatgcaag cccagggaga aatggaggag cttttagacc 500
 acctccctgt cagccagtat taacatgtcc ccttccccct gccccgccgt 550
 agattcagga cattcgcccc tgtgtgccac caaaccagga ctttccccct 600
 ggcttggcat ccttggctct ctctgggtac ccagcaagac gtctgttcca 650
 gggcagtgtg gcatctttca agctccgtta ctatggcgat ggccatgatg 700
 ttacaatccc acttgctga ataataaagt gggaagggga agcagagggga 750
 aatggggcca tgtgaatgca gctgctctgt tctccctacc ctgaggaaaa 800
 accaaagga agcaacagga acttctgcaa ctgggtttta tcggaaagat 850
 catcctgcct gcagatgctg ttgaaggggc acaagaaatg tagctggaga 900
 agattgatga aagtgcaggt gtgtaaggaa atagaacagt ctgctgggag 950
 tcagacctgg aattctgatt ccaaactctt tattactttg ggaagtcaact 1000
 cagcctcccc gtagccatct ccagggtgac ggaaccctag gtattacctg 1050
 ctggaaccaa ggaaactaac aatgtaggtt actagtgaat accccaatgg 1100
 tttctccaat tatgcccatt ccacaaaaac aataaaacaa aattctctaa 1150
 cactgaaa 1158

<210> 438
 <211> 86

<212> PRT
<213> Homo Sapien

<400> 438
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Pro Ile Leu Ser Ser Pro Ser Leu Lys Ser Gln Ala Cys Gln Gln
20 25 30
Leu Leu Trp Thr Leu Pro Ser Pro Leu Val Ala Phe Arg Ala Asn
35 40 45
Arg Thr Thr Tyr Val Met Asp Val Ser Thr Asn Gln Gly Ser Gly
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Met Glu His Arg Asn His Leu Cys Phe Cys Asp Leu Tyr Asp Arg
65 70 75
Ala Thr Ser Pro Pro Leu Lys Cys Ser Leu Leu
80 85

<210> 439
<211> 4277
<212> DNA
<213> Homo Sapien

<400> 439
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cagcggaccg ggagcgacgc agcttgaggg aagcatccct agctgttggc 100
gcagaggggc gaggtgaag ccgagtggcc cgaggtgtct gaggggctgg 150
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His	Val	Ile	Glu	Val	Asp	Glu	Gly	Asn	Thr	Ala	Val	Ile	Ala	Cys
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His	Leu	Pro	Glu	Ser	His	Pro	Lys	Ala	Gln	Val	Arg	Tyr	Ser	Val
				155					160					165
Lys	Gln	Glu	Trp	Leu	Glu	Ala	Ser	Arg	Gly	Asn	Tyr	Leu	Ile	Met
				170					175					180
Pro	Ser	Gly	Asn	Leu	Gln	Ile	Val	Asn	Ala	Ser	Gln	Glu	Asp	Glu
				185					190					195
Gly	Met	Tyr	Lys	Cys	Ala	Ala	Tyr	Asn	Pro	Val	Thr	Gln	Glu	Val
				200					205					210
Lys	Thr	Ser	Gly	Ser	Ser	Asp	Arg	Leu	Arg	Val	Arg	Arg	Ser	Thr
				215					220					225
Ala	Glu	Ala	Ala	Arg	Ile	Ile	Tyr	Pro	Pro	Glu	Ala	Gln	Thr	Ile
				230					235					240
Ile	Val	Thr	Lys	Gly	Gln	Ser	Leu	Ile	Leu	Glu	Cys	Val	Ala	Ser
				245					250					255
Gly	Ile	Pro	Pro	Pro	Arg	Val	Thr	Trp	Ala	Lys	Asp	Gly	Ser	Ser
				260					265					270
Val	Thr	Gly	Tyr	Asn	Lys	Thr	Arg	Phe	Leu	Leu	Ser	Asn	Leu	Leu
				275					280					285
Ile	Asp	Thr	Thr	Ser	Glu	Glu	Asp	Ser	Gly	Thr	Tyr	Arg	Cys	Met
				290					295					300
Ala	Asp	Asn	Gly	Val	Gly	Gln	Pro	Gly	Ala	Ala	Val	Ile	Leu	Tyr
				305					310					315
Asn	Val	Gln	Val	Phe	Glu	Pro	Pro	Glu	Val	Thr	Met	Glu	Leu	Ser
				320					325					330
Gln	Leu	Val	Ile	Pro	Trp	Gly	Gln	Ser	Ala	Lys	Leu	Thr	Cys	Glu
				335					340					345
Val	Arg	Gly	Asn	Pro	Pro	Pro	Ser	Val	Leu	Trp	Leu	Arg	Asn	Ala
				350					355					360
Val	Pro	Leu	Ile	Ser	Ser	Gln	Arg	Leu	Arg	Leu	Ser	Arg	Arg	Ala
				365					370					375
Leu	Arg	Val	Leu	Ser	Met	Gly	Pro	Glu	Asp	Glu	Gly	Val	Tyr	Gln
				380					385					390
Cys	Met	Ala	Glu	Asn	Glu	Val	Gly	Ser	Ala	His	Ala	Val	Val	Gln
				395					400					405
Leu	Arg	Thr	Ser	Arg	Pro	Ser	Ile	Thr	Pro	Arg	Leu	Trp	Gln	Asp
				410					415					420
Ala	Glu	Leu	Ala	Thr	Gly	Thr	Pro	Pro	Val	Ser	Pro	Ser	Lys	Leu

	425		430		435
Gly Asn Pro Glu Gln Met Leu Arg Gly Gln Pro Ala Leu Pro Arg	440		445		450
Pro Pro Thr Ser Val Gly Pro Ala Ser Pro Lys Cys Pro Gly Glu	455		460		465
Lys Gly Gln Gly Ala Pro Ala Glu Ala Pro Ile Ile Leu Ser Ser	470		475		480
Pro Arg Thr Ser Lys Thr Asp Ser Tyr Glu Leu Val Trp Arg Pro	485		490		495
Arg His Glu Gly Ser Gly Arg Ala Pro Ile Leu Tyr Tyr Val Val	500		505		510
Lys His Arg Lys Gln Val Thr Asn Ser Ser Asp Asp Trp Thr Ile	515		520		525
Ser Gly Ile Pro Ala Asn Gln His Arg Leu Thr Leu Thr Arg Leu	530		535		540
Asp Pro Gly Ser Leu Tyr Glu Val Glu Met Ala Ala Tyr Asn Cys	545		550		555
Ala Gly Glu Gly Gln Thr Ala Met Val Thr Phe Arg Thr Gly Arg	560		565		570
Arg Pro Lys Pro Glu Ile Met Ala Ser Lys Glu Gln Gln Ile Gln	575		580		585
Arg Asp Asp Pro Gly Ala Ser Pro Gln Ser Ser Ser Gln Pro Asp	590		595		600
His Gly Arg Leu Ser Pro Pro Glu Ala Pro Asp Arg Pro Thr Ile	605		610		615
Ser Thr Ala Ser Glu Thr Ser Val Tyr Val Thr Trp Ile Pro Arg	620		625		630
Gly Asn Gly Gly Phe Pro Ile Gln Ser Phe Arg Val Glu Tyr Lys	635		640		645
Lys Leu Lys Lys Val Gly Asp Trp Ile Leu Ala Thr Ser Ala Ile	650		655		660
Pro Pro Ser Arg Leu Ser Val Glu Ile Thr Gly Leu Glu Lys Gly	665		670		675
Thr Ser Tyr Lys Phe Arg Val Arg Ala Leu Asn Met Leu Gly Glu	680		685		690
Ser Glu Pro Ser Ala Pro Ser Arg Pro Tyr Val Val Ser Gly Tyr	695		700		705
Ser Gly Arg Val Tyr Glu Arg Pro Val Ala Gly Pro Tyr Ile Thr	710		715		720

1010	1015	1020
Gln Arg Gln Glu Gln Pro Ala Ala Val Gly Gln Ser Gly Val Arg		
1025	1030	1035
Arg Ala Pro Asp Ser Pro Val Leu Glu Ala Val Trp Asp Pro Pro		
1040	1045	1050
Phe His Ser Gly Pro Pro Cys Cys Leu Gly Leu Val Pro Val Glu		
1055	1060	1065
Glu Val Asp Ser Pro Asp Ser Cys Gln Val Ser Gly Gly Asp Trp		
1070	1075	1080
Cys Pro Gln His Pro Val Gly Ala Tyr Val Gly Gln Glu Pro Gly		
1085	1090	1095
Met Gln Leu Ser Pro Gly Pro Leu Val Arg Val Ser Phe Glu Thr		
1100	1105	1110
Pro Pro Leu Thr Ile		
1115		

<210> 441
 <211> 1579
 <212> DNA
 <213> Homo Sapien

<400> 441
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 gaccctcctg ctggcccttg ccctgggcct ggcccagcca gcctctgccc 150
 gccggaagct gctggtgttt ctgctggatg gttttcgctc agactacatc 200
 agtgatgagg cgctggagtc attgcctggc ttcaaagaga ttgtgagcag 250
 gggagtaaaa gtggattact tgactccaga cttccctagt ctctcgatc 300
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 cgtcaacaaa gacagcctaa tgctctctg gtggaatgga tcagaacctc 450
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 atataaaaat gtccaacgg atatcaattt tgccaatgca gtcagcgatg 600
 ctcttgactc cttcaagagt ggccgggccc acctggcagc catataccat 650
 gagcgcatg acgtggaagg ccaccactac gggcctgcat ctccgcagag 700
 gaaagatgcc ctcaaggctg tagacactgt cctgaagtac atgaccaagt 750

Gly	Asn	Tyr	Met	Trp	Asp	Pro	Thr	Thr	Asn	Lys	Ser	Phe	Asp	Ile	95	100	105
Gly	Val	Asn	Lys	Asp	Ser	Leu	Met	Pro	Leu	Trp	Trp	Asn	Gly	Ser	110	115	120
Glu	Pro	Leu	Trp	Val	Thr	Leu	Thr	Lys	Ala	Lys	Arg	Lys	Val	Tyr	125	130	135
Met	Tyr	Tyr	Trp	Pro	Gly	Cys	Glu	Val	Glu	Ile	Leu	Gly	Val	Arg	140	145	150
Pro	Thr	Tyr	Cys	Leu	Glu	Tyr	Lys	Asn	Val	Pro	Thr	Asp	Ile	Asn	155	160	165
Phe	Ala	Asn	Ala	Val	Ser	Asp	Ala	Leu	Asp	Ser	Phe	Lys	Ser	Gly	170	175	180
Arg	Ala	Asp	Leu	Ala	Ala	Ile	Tyr	His	Glu	Arg	Ile	Asp	Val	Glu	185	190	195
Gly	His	His	Tyr	Gly	Pro	Ala	Ser	Pro	Gln	Arg	Lys	Asp	Ala	Leu	200	205	210
Lys	Ala	Val	Asp	Thr	Val	Leu	Lys	Tyr	Met	Thr	Lys	Trp	Ile	Gln	215	220	225
Glu	Arg	Gly	Leu	Gln	Asp	Arg	Leu	Asn	Val	Ile	Ile	Phe	Ser	Asp	230	235	240
His	Gly	Met	Thr	Asp	Ile	Phe	Trp	Met	Asp	Lys	Val	Ile	Glu	Leu	245	250	255
Asn	Lys	Tyr	Ile	Ser	Leu	Asn	Asp	Leu	Gln	Gln	Val	Lys	Asp	Arg	260	265	270
Gly	Pro	Val	Val	Ser	Leu	Trp	Pro	Ala	Pro	Gly	Lys	His	Ser	Glu	275	280	285
Ile	Tyr	Asn	Lys	Leu	Ser	Thr	Val	Glu	His	Met	Thr	Val	Tyr	Glu	290	295	300
Lys	Glu	Ala	Ile	Pro	Ser	Arg	Phe	Tyr	Tyr	Lys	Lys	Gly	Lys	Phe	305	310	315
Val	Ser	Pro	Leu	Thr	Leu	Val	Ala	Asp	Glu	Gly	Trp	Phe	Ile	Thr	320	325	330
Glu	Asn	Arg	Glu	Met	Leu	Pro	Phe	Trp	Met	Asn	Ser	Thr	Gly	Arg	335	340	345
Arg	Glu	Gly	Trp	Gln	Arg	Gly	Trp	His	Gly	Tyr	Asp	Asn	Glu	Leu	350	355	360
Met	Asp	Met	Arg	Gly	Ile	Phe	Leu	Ala	Phe	Gly	Pro	Asp	Phe	Lys	365	370	375
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<210> 444

<211> 135

<212> PRT

<213> Homo Sapien

<400> 444

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Val Pro Gly Gly Gly Arg Ser Lys Arg Asp Pro Asp Leu Tyr Gln
35 40 45

Leu Leu Gln Arg Leu Phe Lys Ser His Ser Ser Leu Glu Gly Leu
50 55 60

Leu Lys Ala Leu Ser Gln Ala Ser Thr Asp Pro Lys Glu Ser Thr
65 70 75

Ser Pro Glu Lys Arg Asp Met His Asp Phe Phe Val Gly Leu Met
80 85 90

Gly Lys Arg Ser Val Gln Pro Glu Gly Lys Thr Gly Pro Phe Leu
95 100 105

Pro Ser Val Arg Val Pro Arg Pro Leu His Pro Asn Gln Leu Gly
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Ser Thr Gly Lys Ser Ser Leu Gly Thr Glu Glu Gln Arg Pro Leu
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<210> 445

<211> 446

<212> DNA

<213> Homo Sapien

<400> 445

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acccccgccc caacttttgg attgtaataa aacaattgaa acacca 446

<210> 446
 <211> 92
 <212> PRT
 <213> Homo Sapien

<400> 446
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 20 25 30
 Phe Tyr Pro Gly Thr Ser Gly Ser Cys Ser Gly Cys Gly Ser Leu
 35 40 45
 Ser Leu Pro Leu Leu Ala Gly Leu Val Ala Ala Asp Ala Val Ala
 50 55 60
 Ser Leu Leu Ile Val Gly Ala Val Phe Leu Cys Ala Arg Pro Arg
 65 70 75
 Arg Ser Pro Ala Gln Asp Gly Lys Val Tyr Ile Asn Met Pro Gly
 80 85 90
 Arg Gly

<210> 447
 <211> 1047
 <212> DNA
 <213> Homo Sapien

<400> 447
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 gccaccatg acccctccct cagggggcac cccacagtc acggtacccc 150
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<210> 448

<211> 197

<212> PRT

<213> Homo Sapien

<400> 448

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Cys	Leu	Ala	His	His	Asp	Pro	Ser	Leu	Arg	Gly	His	Pro	His	Ser	20	25	30	
His	Gly	Thr	Pro	His	Cys	Tyr	Ser	Ala	Glu	Glu	Leu	Pro	Leu	Gly	35	40	45	
Gln	Ala	Pro	Pro	His	Leu	Leu	Ala	Arg	Gly	Ala	Lys	Trp	Gly	Gln	50	55	60	
Ala	Leu	Pro	Val	Ala	Leu	Val	Ser	Ser	Leu	Glu	Ala	Ala	Ser	His	65	70	75	
Arg	Gly	Arg	His	Glu	Arg	Pro	Ser	Ala	Thr	Thr	Gln	Cys	Pro	Val	80	85	90	
Leu	Arg	Pro	Glu	Glu	Val	Leu	Glu	Ala	Asp	Thr	His	Gln	Arg	Ser	95	100	105	
Ile	Ser	Pro	Trp	Arg	Tyr	Arg	Val	Asp	Thr	Asp	Glu	Asp	Arg	Tyr	110	115	120	
Pro	Gln	Lys	Leu	Ala	Phe	Ala	Glu	Cys	Leu	Cys	Arg	Gly	Cys	Ile	125	130	135	
Asp	Ala	Arg	Thr	Gly	Arg	Glu	Thr	Ala	Ala	Leu	Asn	Ser	Val	Arg	140	145	150	
Leu	Leu	Gln	Ser	Leu	Leu	Val	Leu	Arg	Arg	Arg	Pro	Cys	Ser	Arg	155	160	165	
Asp	Gly	Ser	Gly	Leu	Pro	Thr	Pro	Gly	Ala	Phe	Ala	Phe	His	Thr	170	175	180	

Glu Phe Ile His Val Pro Val Gly Cys Thr Cys Val Leu Pro Arg
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Ser Val

<210> 449
 <211> 1690
 <212> DNA
 <213> Homo Sapien

<400> 449
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 gccgagctgc gtgctccgcc agataaaatc gcgattattg gagccggaat 150
 tggtaggact tcagcagcct attacctgcg gcagaaattt gggaaagatg 200
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 gacaacttta gttaaggggg aattgaatac atctatcttt agctctagac 1100
 ccatagataa atttggcctt aatacagttt taaccactga taattcagat 1150

ttgttcatta acagtattgg gattgtgccc tctgtgagag aaaaggaaga 1200
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 ataaaagtaa tccctgctgg tcataggaaa aaaaaaaaaa 1690

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 <211> 505
 <212> PRT
 <213> Homo Sapien

<400> 450
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 Arg Ala Pro Pro Asp Lys Ile Ala Ile Ile Gly Ala Gly Ile Gly
 35 40 45
 Gly Thr Ser Ala Ala Tyr Tyr Leu Arg Gln Lys Phe Gly Lys Asp
 50 55 60
 Val Lys Ile Asp Leu Phe Glu Arg Glu Glu Val Gly Gly Arg Leu
 65 70 75
 Ala Thr Met Met Val Gln Gly Gln Glu Tyr Glu Ala Gly Gly Ser
 80 85 90
 Val Ile His Pro Leu Asn Leu His Met Lys Arg Phe Val Lys Asp
 95 100 105
 Leu Gly Leu Ser Ala Val Gln Ala Ser Gly Gly Leu Leu Gly Ile
 110 115 120
 Tyr Asn Gly Glu Thr Leu Val Phe Glu Glu Ser Asn Trp Phe Ile
 125 130 135
 Ile Asn Val Ile Lys Leu Val Trp Arg Tyr Gly Phe Gln Ser Leu
 140 145 150

440	445	450
His Asp Arg Leu Tyr Tyr Leu Asn Gly	Ile Glu Cys Ala Ala Ser	
455	460	465
Ala Met Glu Met Ser Ala Ile Ala Ala	His Asn Ala Ala Leu Leu	
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Ala Tyr His Arg Trp Asn Gly His Thr	Asp Met Ile Asp Gln Asp	
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Gly Leu Tyr Glu Lys Leu Lys Thr Glu Leu		
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<210> 451
 <211> 1743
 <212> PRT
 <213> Homo Sapien

<400> 451

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Gly Ala Ala Cys Cys Thr Gly Cys Ala Ala Ala Gly Ala Cys Ala	
35 40 45	
Thr Ala Thr Thr Thr Thr Gly Thr Thr Cys Cys Ala Ala Ala Ala	
50 55 60	
Thr Gly Gly Cys Ala Thr Cys Thr Thr Ala Cys Cys Thr Thr Thr	
65 70 75	
Ala Thr Gly Gly Ala Gly Thr Ala Cys Thr Cys Thr Thr Thr Gly	
80 85 90	
Cys Thr Gly Thr Thr Gly Gly Cys Cys Thr Cys Thr Gly Thr Gly	
95 100 105	
Cys Thr Cys Cys Ala Ala Thr Cys Thr Ala Cys Thr Gly Thr Gly	
110 115 120	
Thr Gly Thr Cys Cys Cys Gly Gly Cys Cys Ala Ala Thr Gly	
125 130 135	
Cys Cys Cys Cys Cys Ala Gly Thr Gly Cys Ala Thr Ala Cys Cys	
140 145 150	
Cys Cys Cys Gly Cys Cys Cys Thr Thr Cys Cys Thr Cys Cys Ala	
155 160 165	
Cys Ala Ala Ala Gly Ala Gly Cys Ala Cys Cys Cys Cys Thr Gly	
170 175 180	
Cys Cys Thr Cys Ala Cys Ala Gly Gly Thr Gly Thr Ala Thr Thr	
185 190 195	

Cys Cys Cys Thr	Cys Ala Ala Cys Ala	Cys Cys Gly Ala Cys	Thr
200	205	210	
Thr Thr Gly Cys	Cys Thr Thr Cys Cys	Gly Cys Cys Thr Ala	Thr
215	220	225	
Ala Cys Cys Gly	Cys Ala Gly Gly Cys	Thr Gly Gly Thr Thr	Thr
230	235	240	
Thr Gly Gly Ala	Gly Ala Cys Cys Cys	Cys Gly Ala Gly Thr	Cys
245	250	255	
Ala Gly Ala Ala	Cys Ala Thr Cys Thr	Thr Cys Thr Thr Cys	Thr
260	265	270	
Cys Cys Cys Cys	Thr Gly Thr Gly Ala	Gly Thr Gly Thr Cys	Thr
275	280	285	
Cys Cys Ala Cys	Thr Thr Cys Cys Cys	Thr Gly Gly Cys Cys	Ala
290	295	300	
Thr Gly Cys Thr	Cys Thr Cys Cys Cys	Thr Thr Gly Gly Gly	Gly
305	310	315	
Cys Cys Cys Ala	Cys Thr Cys Ala Gly	Thr Cys Ala Cys Cys	Ala
320	325	330	
Ala Gly Ala Cys	Cys Cys Ala Gly Ala	Thr Thr Cys Thr Cys	Cys
335	340	345	
Ala Gly Gly Gly	Cys Cys Thr Gly Gly	Gly Cys Thr Thr Cys	Ala
350	355	360	
Ala Cys Cys Thr	Cys Ala Cys Ala Cys	Ala Cys Ala Cys Ala	Cys
365	370	375	
Cys Ala Gly Ala	Gly Thr Cys Thr Gly	Cys Cys Ala Thr Cys	Cys
380	385	390	
Ala Cys Cys Ala	Gly Gly Gly Cys Thr	Thr Cys Cys Ala Gly	Cys
395	400	405	
Ala Cys Cys Thr	Gly Gly Thr Thr Cys	Ala Cys Thr Cys Ala	Cys
410	415	420	
Thr Gly Ala Cys	Thr Gly Thr Thr Cys	Cys Cys Ala Gly Cys	Ala
425	430	435	
Ala Ala Gly Ala	Cys Cys Thr Gly Ala	Cys Cys Thr Thr Gly	Ala
440	445	450	
Ala Gly Ala Thr	Gly Gly Gly Ala Ala	Gly Thr Gly Cys Cys	Cys
455	460	465	
Thr Cys Thr Thr	Cys Gly Thr Cys Ala	Ala Gly Ala Ala Gly	Gly
470	475	480	
Ala Gly Cys Thr	Gly Cys Ala Gly Cys	Thr Gly Cys Ala Gly	Gly

				485					490					495	
Cys	Ala	Ala	Ala	Thr 500	Thr	Thr	Thr	Cys	Thr	Thr 505	Gly	Gly	Gly	Cys	Ala 510
Ala	Thr	Gly	Thr	Cys 515	Ala	Ala	Gly	Ala	Gly	Gly 520	Gly	Cys	Thr	Gly	Thr 525
Ala	Thr	Gly	Ala	Ala 530	Gly	Cys	Ala	Gly	Ala	Ala 535	Gly	Thr	Cys	Thr	Thr 540
Thr	Thr	Thr	Cys	Thr 545	Ala	Cys	Ala	Gly	Ala	Thr 550	Thr	Thr	Thr	Cys	Thr 555
Cys	Cys	Ala	Ala	Cys 560	Cys	Cys	Cys	Thr	Cys	Cys 565	Cys	Ala	Thr	Thr	Gly 570
Cys	Cys	Cys	Ala	Gly 575	Gly	Cys	Gly	Ala	Gly	Gly 580	Gly	Ala	Thr	Cys	Ala 585
Ala	Cys	Ala	Gly	Cys 590	Cys	Ala	Thr	Gly	Thr	Gly 595	Gly	Ala	Ala	Ala	Ala 600
Ala	Gly	Ala	Ala	Gly 605	Ala	Cys	Cys	Cys	Ala	Ala 610	Gly	Gly	Gly	Gly	Ala 615
Ala	Gly	Gly	Thr	Thr 620	Gly	Thr	Ala	Gly	Ala	Cys 625	Ala	Thr	Ala	Ala	Ala 630
Thr	Cys	Cys	Ala	Ala 635	Gly	Gly	Cys	Cys	Thr	Thr 640	Thr	Gly	Ala	Cys	Cys 645
Thr	Thr	Cys	Thr	Gly 650	Ala	Cys	Gly	Gly	Cys	Cys 655	Cys	Ala	Thr	Gly	Gly 660
Thr	Thr	Cys	Thr	Gly 665	Gly	Thr	Gly	Ala	Ala	Thr 670	Cys	Ala	Cys	Ala	Ala 675
Thr	Thr	Thr	Thr	Cys 680	Thr	Thr	Thr	Ala	Ala	Ala 685	Gly	Cys	Cys	Cys	Ala 690
Ala	Gly	Thr	Gly	Gly 695	Gly	Ala	Gly	Ala	Ala	Gly 700	Cys	Cys	Cys	Thr	Thr 705
Thr	Thr	Cys	Ala	Cys 710	Cys	Thr	Thr	Gly	Ala	Ala 715	Thr	Ala	Thr	Ala	Ala 720
Cys	Ala	Ala	Gly	Ala 725	Ala	Ala	Gly	Ala	Ala	Cys 730	Thr	Thr	Cys	Cys	Cys 735
Cys	Ala	Thr	Thr	Cys 740	Cys	Thr	Gly	Gly	Thr	Gly 745	Gly	Gly	Gly	Cys	Gly 750
Ala	Gly	Cys	Ala	Gly 755	Gly	Thr	Cys	Ala	Cys	Thr 760	Gly	Thr	Gly	Cys	Cys 765
Ala	Ala	Gly	Thr	Cys 770	Cys	Cys	Cys	Ala	Thr	Gly 775	Ala	Thr	Gly	Cys	Cys 780

Ala Cys Cys Ala Gly Ala Ala Ala Gly Ala Gly Cys Ala Gly Thr	785	790	795
Thr Cys Gly Cys Thr Thr Thr Thr Gly Gly Gly Gly Thr Gly Gly	800	805	810
Ala Thr Ala Cys Ala Gly Ala Gly Cys Thr Gly Ala Ala Cys Thr	815	820	825
Gly Cys Thr Thr Thr Gly Thr Gly Cys Thr Gly Cys Ala Gly Ala	830	835	840
Thr Gly Gly Ala Thr Thr Ala Cys Ala Ala Gly Gly Gly Ala Gly	845	850	855
Ala Thr Gly Cys Cys Gly Thr Gly Gly Cys Cys Thr Thr Cys Thr	860	865	870
Thr Thr Gly Thr Cys Cys Thr Cys Cys Cys Thr Ala Gly Cys Ala	875	880	885
Ala Gly Gly Gly Cys Ala Ala Gly Ala Thr Gly Ala Gly Gly Cys	890	895	900
Ala Ala Cys Thr Gly Gly Ala Ala Cys Ala Gly Gly Cys Cys Thr	905	910	915
Thr Gly Thr Cys Ala Gly Cys Cys Ala Gly Ala Ala Cys Ala Cys	920	925	930
Thr Gly Ala Thr Ala Ala Ala Gly Thr Gly Gly Ala Gly Cys Cys	935	940	945
Ala Cys Thr Cys Ala Cys Thr Cys Cys Ala Gly Ala Ala Ala Ala	950	955	960
Gly Gly Thr Gly Gly Ala Thr Ala Gly Ala Gly Gly Thr Gly Thr	965	970	975
Thr Cys Ala Thr Cys Cys Cys Cys Ala Gly Ala Thr Thr Thr Thr	980	985	990
Cys Cys Ala Thr Thr Thr Cys Thr Gly Cys Cys Thr Cys Cys Thr	995	1000	1005
Ala Cys Ala Ala Thr Cys Thr Gly Gly Ala Ala Ala Cys Cys Ala	1010	1015	1020
Thr Cys Cys Thr Cys Cys Cys Gly Ala Ala Gly Ala Thr Gly Gly	1025	1030	1035
Gly Cys Ala Thr Cys Cys Ala Ala Ala Ala Thr Gly Cys Cys Thr	1040	1045	1050
Thr Thr Gly Ala Cys Ala Ala Ala Ala Ala Thr Gly Cys Thr Gly	1055	1060	1065
Ala Thr Thr Thr Thr Thr Thr Cys Thr Gly Gly Ala Ala Thr Thr Gly			

1070	1075	1080
Cys Ala Ala Ala Gly Ala Gly Ala Gly Ala Cys Thr Cys Cys Cys		
1085	1090	1095
Thr Gly Cys Ala Gly Gly Thr Thr Thr Cys Thr Ala Ala Ala Gly		
1100	1105	1110
Cys Ala Ala Cys Cys Cys Ala Cys Ala Ala Gly Gly Cys Thr Gly		
1115	1120	1125
Thr Gly Cys Thr Gly Gly Ala Thr Gly Thr Cys Ala Gly Thr Gly		
1130	1135	1140
Ala Ala Gly Ala Gly Gly Gly Cys Ala Cys Thr Gly Ala Gly Gly		
1145	1150	1155
Cys Cys Ala Cys Ala Gly Cys Ala Gly Cys Thr Ala Cys Cys Ala		
1160	1165	1170
Cys Cys Ala Cys Cys Ala Ala Gly Thr Thr Cys Ala Thr Ala Gly		
1175	1180	1185
Thr Cys Cys Gly Ala Thr Cys Gly Ala Ala Gly Gly Ala Thr Gly		
1190	1195	1200
Gly Thr Cys Cys Cys Thr Cys Thr Thr Ala Cys Thr Thr Cys Ala		
1205	1210	1215
Cys Thr Gly Thr Cys Thr Cys Cys Thr Thr Cys Ala Ala Thr Ala		
1220	1225	1230
Gly Gly Ala Cys Cys Thr Thr Cys Cys Thr Gly Ala Thr Gly Ala		
1235	1240	1245
Thr Gly Ala Thr Thr Ala Cys Ala Ala Ala Thr Ala Ala Ala Gly		
1250	1255	1260
Cys Cys Ala Cys Ala Gly Ala Cys Gly Gly Thr Ala Thr Thr Cys		
1265	1270	1275
Thr Cys Thr Thr Thr Cys Thr Ala Gly Gly Gly Ala Ala Ala Gly		
1280	1285	1290
Thr Gly Gly Ala Ala Ala Thr Cys Cys Cys Ala Cys Thr Ala		
1295	1300	1305
Ala Ala Thr Cys Cys Thr Ala Gly Gly Thr Gly Gly Gly Ala Ala		
1310	1315	1320
Ala Thr Gly Gly Cys Cys Thr Gly Thr Thr Ala Ala Cys Thr Gly		
1325	1330	1335
Ala Thr Gly Gly Cys Ala Cys Ala Thr Thr Gly Cys Thr Ala Ala		
1340	1345	1350
Thr Gly Cys Ala Cys Ala Ala Gly Ala Ala Ala Thr Ala Ala Cys		
1355	1360	1365

Ala Ala Ala Cys Cys Ala Cys Ala Thr Cys Cys Cys Thr Cys Thr	1370	1375	1380
Thr Thr Cys Thr Gly Thr Thr Cys Thr Gly Ala Gly Gly Gly Thr	1385	1390	1395
Gly Cys Ala Thr Thr Thr Gly Ala Cys Cys Cys Cys Ala Gly Thr	1400	1405	1410
Gly Gly Ala Gly Cys Thr Gly Gly Ala Thr Thr Cys Gly Cys Thr	1415	1420	1425
Gly Gly Cys Ala Gly Gly Gly Ala Thr Gly Cys Cys Ala Cys Thr	1430	1435	1440
Thr Cys Cys Ala Ala Gly Gly Cys Thr Cys Ala Ala Thr Cys Ala	1445	1450	1455
Cys Cys Ala Ala Ala Cys Cys Ala Thr Cys Ala Ala Cys Ala Gly	1460	1465	1470
Gly Gly Ala Cys Cys Cys Cys Ala Gly Thr Cys Ala Cys Ala Ala	1475	1480	1485
Gly Cys Cys Ala Ala Cys Ala Cys Cys Cys Ala Thr Thr Ala Ala	1490	1495	1500
Cys Cys Cys Cys Ala Gly Thr Cys Ala Gly Thr Gly Cys Cys Cys	1505	1510	1515
Thr Thr Thr Thr Cys Cys Ala Cys Ala Ala Ala Thr Thr Cys Thr	1520	1525	1530
Cys Cys Cys Ala Gly Gly Thr Ala Ala Cys Thr Ala Gly Cys Thr	1535	1540	1545
Thr Cys Ala Thr Gly Gly Gly Ala Thr Gly Thr Thr Gly Cys Thr	1550	1555	1560
Gly Gly Gly Thr Thr Ala Cys Cys Ala Thr Ala Thr Thr Thr Cys	1565	1570	1575
Cys Ala Thr Thr Cys Cys Thr Thr Gly Gly Gly Gly Cys Thr Cys	1580	1585	1590
Cys Cys Ala Gly Gly Ala Ala Thr Gly Gly Ala Ala Ala Thr Ala	1595	1600	1605
Cys Gly Cys Cys Ala Ala Cys Cys Cys Ala Gly Gly Thr Thr Ala	1610	1615	1620
Gly Gly Cys Ala Cys Cys Thr Cys Thr Ala Thr Thr Gly Cys Ala	1625	1630	1635
Gly Ala Ala Thr Thr Ala Cys Ala Ala Thr Ala Ala Cys Ala Cys	1640	1645	1650
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1655	1660	1665
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<210> 452
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 <212> PRT
 <213> Homo Sapien

<400> 452
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Pro Arg Pro Ser Ser Thr Lys Ser Thr Pro Ala Ser Gln Val Tyr
35 40 45
Ser Leu Asn Thr Asp Phe Ala Phe Arg Leu Tyr Arg Arg Leu Val
50 55 60
Leu Glu Thr Pro Ser Gln Asn Ile Phe Phe Ser Pro Val Ser Val
65 70 75
Ser Thr Ser Leu Ala Met Leu Ser Leu Gly Ala His Ser Val Thr
80 85 90
Lys Thr Gln Ile Leu Gln Gly Leu Gly Phe Asn Leu Thr His Thr
95 100 105
Pro Glu Ser Ala Ile His Gln Gly Phe Gln His Leu Val His Ser
110 115 120
Leu Thr Val Pro Ser Lys Asp Leu Thr Leu Lys Met Gly Ser Ala
125 130 135
Leu Phe Val Lys Lys Glu Leu Gln Leu Gln Ala Asn Phe Leu Gly
140 145 150
Asn Val Lys Arg Leu Tyr Glu Ala Glu Val Phe Ser Thr Asp Phe
155 160 165

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Phe	Ala	Leu	Ser	Ser 95	Asn	Leu	Ser	Phe	Leu 100	Pro	Gly	Gly	Glu	Tyr 105
Gln	Glu	Leu	Leu	Trp 110	Gly	Ala	Asp	Ala	Glu 115	Lys	Lys	Gln	Gln	Cys 120
Ser	Phe	Lys	Gly	Lys 125	Asp	Pro	Gln	Arg	Asp 130	Cys	Gln	Asn	Tyr	Ile 135
Lys	Ile	Leu	Leu	Pro 140	Leu	Ser	Gly	Ser	His 145	Leu	Phe	Thr	Cys	Gly 150
Thr	Ala	Ala	Phe	Ser 155	Pro	Met	Cys	Thr	Tyr 160	Ile	Asn	Met	Glu	Asn 165
Phe	Thr	Leu	Ala	Arg 170	Asp	Glu	Lys	Gly	Asn 175	Val	Leu	Leu	Glu	Asp 180
Gly	Lys	Gly	Arg	Cys 185	Pro	Phe	Asp	Pro	Asn 190	Phe	Lys	Ser	Thr	Ala 195
Leu	Val	Val	Asp	Gly 200	Glu	Leu	Tyr	Thr	Gly 205	Thr	Val	Ser	Ser	Phe 210
Gln	Gly	Asn	Asp	Pro 215	Ala	Ile	Ser	Arg	Ser 220	Gln	Ser	Leu	Arg	Pro 225
Thr	Lys	Thr	Glu	Ser 230	Ser	Leu	Asn	Trp	Leu 235	Gln	Asp	Pro	Ala	Phe 240
Val	Ala	Ser	Ala	Tyr 245	Ile	Pro	Glu	Ser	Leu 250	Gly	Ser	Leu	Gln	Gly 255
Asp	Asp	Asp	Lys	Ile 260	Tyr	Phe	Phe	Phe	Ser 265	Glu	Thr	Gly	Gln	Glu 270
Phe	Glu	Phe	Phe	Glu 275	Asn	Thr	Ile	Val	Ser 280	Arg	Ile	Ala	Arg	Ile 285
Cys	Lys	Gly	Asp	Glu 290	Gly	Gly	Glu	Arg	Val 295	Leu	Gln	Gln	Arg	Trp 300
Thr	Ser	Phe	Leu	Lys 305	Ala	Gln	Leu	Leu	Cys 310	Ser	Arg	Pro	Asp	Asp 315
Gly	Phe	Pro	Phe	Asn 320	Val	Leu	Gln	Asp	Val 325	Phe	Thr	Leu	Ser	Pro 330
Ser	Pro	Gln	Asp	Trp 335	Arg	Asp	Thr	Leu	Phe 340	Tyr	Gly	Val	Phe	Thr 345
Ser	Gln	Trp	His	Arg 350	Gly	Thr	Thr	Glu	Gly 355	Ser	Ala	Val	Cys	Val 360
Phe	Thr	Met	Lys	Asp 365	Val	Gln	Arg	Val	Phe 370	Ser	Gly	Leu	Tyr	Lys 375
Glu	Val	Asn	Arg	Glu	Thr	Gln	Gln	Trp	Tyr	Thr	Val	Thr	His	Pro

Val	Pro	Thr	Pro	Arg	Pro	Gly	Ala	Cys	Ile	Thr	Asn	Ser	Ala	Arg	380	385	390
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Glu	Arg	Lys	Ile	Asn	Ser	Ser	Leu	Gln	Leu	Pro	Asp	Arg	Val	Leu			
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Asn	Phe	Leu	Lys	Asp	His	Phe	Leu	Met	Asp	Gly	Gln	Val	Arg	Ser			
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Arg	Met	Leu	Leu	Leu	Gln	Pro	Gln	Ala	Arg	Tyr	Gln	Arg	Val	Ala			
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Val	His	Arg	Val	Pro	Gly	Leu	His	His	Thr	Tyr	Asp	Val	Leu	Phe			
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Leu	Gly	Thr	Gly	Asp	Gly	Arg	Leu	His	Lys	Ala	Val	Ser	Val	Gly			
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Pro	Arg	Val	His	Ile	Ile	Glu	Glu	Leu	Gln	Ile	Phe	Ser	Ser	Gly			
				485					490					495			
Gln	Pro	Val	Gln	Asn	Leu	Leu	Leu	Asp	Thr	His	Arg	Gly	Leu	Leu			
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Tyr	Ala	Ala	Ser	His	Ser	Gly	Val	Val	Gln	Val	Pro	Met	Ala	Asn			
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Cys	Ser	Leu	Tyr	Arg	Ser	Cys	Gly	Asp	Cys	Leu	Leu	Ala	Arg	Asp			
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Pro	Tyr	Cys	Ala	Trp	Ser	Gly	Ser	Ser	Cys	Lys	His	Val	Ser	Leu			
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Tyr	Gln	Pro	Gln	Leu	Ala	Thr	Arg	Pro	Trp	Ile	Gln	Asp	Ile	Glu			
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Gly	Ala	Ser	Ala	Lys	Asp	Leu	Cys	Ser	Ala	Ser	Ser	Val	Val	Ser			
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Pro	Ser	Phe	Val	Pro	Thr	Gly	Glu	Lys	Pro	Cys	Glu	Gln	Val	Gln			
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Phe	Gln	Pro	Asn	Thr	Val	Asn	Thr	Leu	Ala	Cys	Pro	Leu	Leu	Ser			
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Asn	Leu	Ala	Thr	Arg	Leu	Trp	Leu	Arg	Asn	Gly	Ala	Pro	Val	Asn			
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Ala	Ser	Ala	Ser	Cys	His	Val	Leu	Pro	Thr	Gly	Asp	Leu	Leu	Leu			
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Val	Gly	Thr	Gln	Gln	Leu	Gly	Glu	Phe	Gln	Cys	Trp	Ser	Leu	Glu			
				650					655					660			
Glu	Gly	Phe	Gln	Gln	Leu	Val	Ala	Ser	Tyr	Cys	Pro	Glu	Val	Val			
				665					670					675			

Glu Asp Gly Val Ala Asp Gln Thr Asp Glu Gly Gly Ser Val Pro
680 685 690

Val Ile Ile Ser Thr Ser Arg Val Ser Ala Pro Ala Gly Gly Lys
695 700 705

Ala Ser Trp Gly Ala Asp Arg Ser Tyr Trp Lys Glu Phe Leu Val
710 715 720

Met Cys Thr Leu Phe Val Leu Ala Val Leu Leu Pro Val Leu Phe
725 730 735

Leu Leu Tyr Arg His Arg Asn Ser Met Lys Val Phe Leu Lys Gln
740 745 750

Gly Glu Cys Ala Ser Val His Pro Lys Thr Cys Pro Val Val Leu
755 760 765

Pro Pro Glu Thr Arg Pro Leu Asn Gly Leu Gly Pro Pro Ser Thr
770 775 780

Pro Leu Asp His Arg Gly Tyr Gln Ser Leu Ser Asp Ser Pro Pro
785 790 795

Gly Ala Arg Val Phe Thr Glu Ser Glu Lys Arg Pro Leu Ser Ile
800 805 810

Gln Asp Ser Phe Val Glu Val Ser Pro Val Cys Pro Arg Pro Arg
815 820 825

Val Arg Leu Gly Ser Glu Ile Arg Asp Ser Val Val
830 835

<210> 455
<211> 1903
<212> DNA
<213> Homo Sapien

<400> 455
taagatgagg gcatccctca cgttcacacc cctggtggca tctgccagcc 50
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ggaagccaag ccctacagtg cagaggaaac agaatttcaa cggaagctg 150
gtttgcttca taccattggg atctgctggt aaagctgtta tttgggttta 200
gggactgata ccttgcaagt tacttctgga tcaccatgaa tggccaagat 250
ggtggcagaa cagcgtgtgg accctgagtt agagacaatg caaatgttgg 300
attgggtgta attctttttg aatcccagat ccagtctgta cttgaatatg 350
agcagaagat ctacaagaat gctgacaggg aaccgtgtta agaccagca 400
cccctattcc caggagcttc tggcctgacc atctgcagcc aaagcactaa 450
cagggacaga tatgggaatg tccacctttg atccgcatcc tgcacaatag 500

tgggtcccacc atgggtgccca cttttttata ctatttggag aaaagacctt 550
 gtataaatc gagggccgag tgactaacgt ctctgtcaca cggaaatggg 600
 tacttgggtgg catagagaaa cacaattagc cactttttca gctacacttc 650
 tcactcagct gcaccctaca cttctcactc aggtgcaccc ccttctgctg 700
 tcctttcccc aacgtactgg gtcccgagcg tgggtgggtat ttgccacact 750
 ggggtgccagc tcagcagccc cccacctctc tttattctct ccaaagctgg 800
 tctttctgac tatcattgtg gtagggggag gacagatgct aaaggtggaa 850
 gctgacctgg agaaagagac acacgggggtg actgtggcaa aggacagctg 900
 gaaaagaaac tctatcactt cttcattggc aaccacaagg cacccgaggc 950
 catggcactc ccagaggctg tgcgcagagc caagcctctc aacctcttct 1000
 ggccctgcgt cctgcagcga agtctctgct gtaagacagt agactccttc 1050
 gatgaggtgc tcaaaaatgc taccgggggt ggtggtgtct ggcttgcagt 1100
 ctggcccagt tcagagaaag ttgcagagat caggggccaag ggatgtcata 1150
 gccccagggt gtcctcaggg tcccaatcct agggcagggt gtgcatggaa 1200
 gcaagaacta tggaaacctg gctccagtct gcaggctctg agccccctagt 1250
 tcctcactcc agcgggggctc cctcactgca cagaaccac cccttctgtg 1300
 tgggcactgc tgaccacaca gatgaccag acccaaagag cctggcagaa 1350
 gctctgtggt tggagctggg ctccgtctcc aggtctggtt cagggggatc 1400
 aggaaggctc ttttccacct gtggcttcac tggcccttg agatttccta 1450
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 taccgtgttc ctccagggtt taagccggcc atgccttccc gagagcataa 1550
 ccaacttgac aggggtgccc agttaccca caaactgaag gaaggagatc 1600
 cttccccctg ccccgagggt gctctcaacc agcctcagaa agcttgagaa 1650
 gatggaccct ttgccacca gggtaattc ctggtggggc agctcggtg 1700
 tgatcagggc aaccaaact ataggaagcc ttccagtgtg agctggaatt 1750
 agactgaaca tgtgcttggg cctgcctctc cctagacgca gttgcggggc 1800
 actccaggga atgaaccagc tcaagtgtgt ccctaacagc agcctggagc 1850
 taccaccaat ccctcacagc ctgaccctcc tcattccatc agatctcgtg 1900
 ccg 1903

<210> 456
 <211> 148
 <212> PRT
 <213> Homo Sapien

<400> 456
 Met Gly Thr Trp Trp His Arg Glu Thr Gln Leu Ala Thr Phe Ser
 1 5 10 15
 Ala Thr Leu Leu Thr Gln Leu His Pro Thr Leu Leu Thr Gln Val
 20 25 30
 His Pro Leu Leu Leu Ser Phe Pro Gln Arg Thr Gly Ser Arg Ala
 35 40 45
 Trp Trp Val Phe Ala Thr Leu Gly Ala Ser Ser Ala Ala Pro His
 50 55 60
 Leu Ser Leu Phe Ser Pro Lys Leu Val Phe Leu Thr Ile Ile Val
 65 70 75
 Val Gly Gly Gly Gln Met Leu Lys Val Glu Ala Asp Leu Glu Lys
 80 85 90
 Glu Thr His Gly Val Thr Val Ala Lys Asp Ser Trp Lys Arg Asn
 95 100 105
 Ser Ile Thr Ser Ser Leu Ala Thr Thr Arg His Pro Arg Pro Trp
 110 115 120
 His Ser Gln Arg Leu Cys Ala Glu Pro Ser Leu Ser Thr Ser Ser
 125 130 135
 Gly Pro Ala Ser Cys Ser Glu Val Ser Ala Val Arg Gln
 140 145

<210> 457
 <211> 2388
 <212> DNA
 <213> Homo Sapien

<400> 457
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 cctggccgcc ttcgcgccgg ccgtcgcccc ggctctgggg gcgcccagga 100
 actcgggtgct gggcctcgcg cagcccggga ccaccaaggt ccagggctcg 150
 accccggccc tgcatagcag cccggcacag ccgcccggcg agacagctaa 200
 cgggacctca gaacagcatg tccggattcg agtcatcaag aagaaaaagg 250
 tcattatgaa gaagcggaag aagctaactc taactcgccc caccacctg 300
 gtgactgccg ggccccttgt gacccccact ccagcaggga cctcgcacc 350
 cgctgagaaa caagaaacag gctgtcctcc tttgggtctg gagtccctgc 400

ggagaacaac aaagacgccc tcctcaccta cctggagcag gtgcgcatgg 1900
 gcattgcagg agtggtgagg gacaaggaca cggagcttgg gattgctgac 1950
 gctgtcattg ccgtggatgg gattaacccat gacgtgacca cggcgtgggg 2000
 cggggattat tggcgtctgc tgaccccagg ggactacatg gtgactgcca 2050
 gtgccgaggg ctaccattca gtgacacgga actgtcgggt cacctttgaa 2100
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 ggcgcctgga gcggtctaagg ggacagaagg attgatacct gcggtttaag 2250
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 gggagggaca aagtgaggaa aagggtgctca ttaaagctac cgggcacctt 2350
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2388

<210> 458

<211> 734

<212> PRT

<213> Homo Sapien

<400> 458

Met	Trp	Gly	Leu	Leu	Leu	Ala	Leu	Ala	Ala	Phe	Ala	Pro	Ala	Val
1				5					10					15
Gly	Pro	Ala	Leu	Gly	Ala	Pro	Arg	Asn	Ser	Val	Leu	Gly	Leu	Ala
			20						25					30
Gln	Pro	Gly	Thr	Thr	Lys	Val	Pro	Gly	Ser	Thr	Pro	Ala	Leu	His
			35						40					45
Ser	Ser	Pro	Ala	Gln	Pro	Pro	Ala	Glu	Thr	Ala	Asn	Gly	Thr	Ser
			50						55					60
Glu	Gln	His	Val	Arg	Ile	Arg	Val	Ile	Lys	Lys	Lys	Lys	Val	Ile
			65						70					75
Met	Lys	Lys	Arg	Lys	Lys	Leu	Thr	Leu	Thr	Arg	Pro	Thr	Pro	Leu
			80						85					90
Val	Thr	Ala	Gly	Pro	Leu	Val	Thr	Pro	Thr	Pro	Ala	Gly	Thr	Leu
			95						100					105
Asp	Pro	Ala	Glu	Lys	Gln	Glu	Thr	Gly	Cys	Pro	Pro	Leu	Gly	Leu
			110						115					120
Glu	Ser	Leu	Arg	Val	Ser	Asp	Ser	Arg	Leu	Glu	Ala	Ser	Ser	Ser
			125						130					135
Gln	Ser	Phe	Gly	Leu	Gly	Pro	His	Arg	Gly	Arg	Leu	Asn	Ile	His
			140						145					150

				440					445					450
Gly	Lys	Val	Pro	His	Ile	Val	Pro	Asn	His	His	Leu	Pro	Leu	Pro
				455					460					465
Thr	Tyr	Tyr	Thr	Leu	Pro	Asn	Ala	Thr	Val	Ala	Pro	Glu	Thr	Arg
				470					475					480
Ala	Val	Ile	Lys	Trp	Met	Lys	Arg	Ile	Pro	Phe	Val	Leu	Ser	Ala
				485					490					495
Asn	Leu	His	Gly	Gly	Glu	Leu	Val	Val	Ser	Tyr	Pro	Phe	Asp	Met
				500					505					510
Thr	Arg	Thr	Pro	Trp	Ala	Ala	Arg	Glu	Leu	Thr	Pro	Thr	Pro	Asp
				515					520					525
Asp	Ala	Val	Phe	Arg	Trp	Leu	Ser	Thr	Val	Tyr	Ala	Gly	Ser	Asn
				530					535					540
Leu	Ala	Met	Gln	Asp	Thr	Ser	Arg	Arg	Pro	Cys	His	Ser	Gln	Asp
				545					550					555
Phe	Ser	Val	His	Gly	Asn	Ile	Ile	Asn	Gly	Ala	Asp	Trp	His	Thr
				560					565					570
Val	Pro	Gly	Ser	Met	Asn	Asp	Phe	Ser	Tyr	Leu	His	Thr	Asn	Cys
				575					580					585
Phe	Glu	Val	Thr	Val	Glu	Leu	Ser	Cys	Asp	Lys	Phe	Pro	His	Glu
				590					595					600
Asn	Glu	Leu	Pro	Gln	Glu	Trp	Glu	Asn	Asn	Lys	Asp	Ala	Leu	Leu
				605					610					615
Thr	Tyr	Leu	Glu	Gln	Val	Arg	Met	Gly	Ile	Ala	Gly	Val	Val	Arg
				620					625					630
Asp	Lys	Asp	Thr	Glu	Leu	Gly	Ile	Ala	Asp	Ala	Val	Ile	Ala	Val
				635					640					645
Asp	Gly	Ile	Asn	His	Asp	Val	Thr	Thr	Ala	Trp	Gly	Gly	Asp	Tyr
				650					655					660
Trp	Arg	Leu	Leu	Thr	Pro	Gly	Asp	Tyr	Met	Val	Thr	Ala	Ser	Ala
				665					670					675
Glu	Gly	Tyr	His	Ser	Val	Thr	Arg	Asn	Cys	Arg	Val	Thr	Phe	Glu
				680					685					690
Glu	Gly	Pro	Phe	Pro	Cys	Asn	Phe	Val	Leu	Thr	Lys	Thr	Pro	Lys
				695					700					705
Gln	Arg	Leu	Arg	Glu	Leu	Leu	Ala	Ala	Gly	Ala	Lys	Val	Pro	Pro
				710					715					720
Asp	Leu	Arg	Arg	Arg	Leu	Glu	Arg	Leu	Arg	Gly	Gln	Lys	Asp	
				725					730					

<210> 459
 <211> 537
 <212> DNA
 <213> Homo Sapien

<400> 459
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 gcgtcagaga gaaagaactg actgaaacgt ttgagatgaa gaaagttctc 100
 ctctgatca cagccatctt ggagtggtt gttggtttcc cagtctctca 150
 agaccaggaa cgagaaaaaa gaagtatcag tgacagcgat gaattagctt 200
 caggggttttt tgtgttcctt taccatattc catttcgccc acttccacca 250
 attccatttc caagatttcc atggtttaga cgtaattttc ctattccaat 300
 acctgaatct gcccctacaa ctccccctcc tagcgaaaag taaacaagaa 350
 ggataagtca cgataaacct ggtcacctga aattgaaatt gagccacttc 400
 cttgaagaat caaaattcct gttaataaaa gaaaaacaaa tgtaattgaa 450
 atagcacaca gcattctcta gtcaatatct ttagtgatct tctttaataa 500
 acatgaaagc aaagattttg gtttcttaat ttccaca 537

<210> 460
 <211> 85
 <212> PRT
 <213> Homo Sapien

<400> 460
 Met Lys Lys Val Leu Leu Leu Ile Thr Ala Ile Leu Ala Val Ala
 1 5 10 15
 Val Gly Phe Pro Val Ser Gln Asp Gln Glu Arg Glu Lys Arg Ser
 20 25 30
 Ile Ser Asp Ser Asp Glu Leu Ala Ser Gly Phe Phe Val Phe Pro
 35 40 45
 Tyr Pro Tyr Pro Phe Arg Pro Leu Pro Pro Ile Pro Phe Pro Arg
 50 55 60
 Phe Pro Trp Phe Arg Arg Asn Phe Pro Ile Pro Ile Pro Glu Ser
 65 70 75
 Ala Pro Thr Thr Pro Leu Pro Ser Glu Lys
 80 85

<210> 461
 <211> 1536
 <212> DNA
 <213> Homo Sapien

<400> 461

agcaggagca	ggagagggac	aatggaagct	gccccgtcca	ggttcatgtt	50
cctcttattt	ctcctcacgt	gtgagctggc	tgcagaagtt	gctgcagaag	100
ttgagaaatc	ctcagatggg	cctggtgctg	cccaggaacc	cacgtggctc	150
acagatgtcc	cagctgccat	ggaattcatt	gctgccactg	aggtggctgt	200
cataggcttc	ttccaggatt	tagaaatacc	agcagtgcc	atactccata	250
gcatggtgca	aaaattccca	ggcgtgtcat	ttgggatcag	cactgattct	300
gaggttctga	cacactacaa	catcactggg	aacaccatct	gcctctttcg	350
cctggtagac	aatgaacaac	tgaatttaga	ggacgaagac	attgaaagca	400
ttgatgccac	caaattgagc	cgtttcattg	agatcaacag	cctccacatg	450
gtgacagagt	acaaccctgt	gactgtgatt	gggttattca	acagcgtaat	500
tcagattcat	ctcctcctga	taatgaacaa	ggcctcccca	gagtatgaag	550
agaacatgca	cagataccag	aaggcagcca	agctcttcca	ggggaagatt	600
ctctttattc	tggtggacag	tggtatgaaa	gaaaatggga	aggtgatatc	650
atTTTTcaaa	ctaaaggagt	ctcaactgcc	agctttggca	atttaccaga	700
ctctagatga	cgagtgggat	acactgcccc	cagcagaagt	ttccgtagag	750
catgtgcaaa	acttttgtga	tggattccta	agtggaaaat	tgttgaaaga	800
aaatcgtgaa	tcagaaggaa	agactccaaa	ggtggaactc	tgacttctcc	850
ttggaactac	atatggccaa	gtatctactt	tatgcaaagt	aaaaaggcac	900
aactcaaatc	tcagagacac	taaacaacag	gatcactagg	cctgccaaacc	950
acacacacac	gcacgtgcac	acacgcacgc	acgcgtgcac	acacacacgc	1000
gcacacacac	acacacacag	agcttcattt	cctgtcttaa	aatctcgttt	1050
tctcttcttc	cttcttttaa	atttcatatc	ctcactccct	atccaatttc	1100
cttcttatcg	tgcattcata	ctctgtaagc	ccatctgtaa	cacacctaga	1150
tcaaggcttt	aagagactca	ctgtgatgcc	tctatgaaag	agaggcattc	1200
ctagagaaag	attgttccaa	tttgtcattt	aatatcaagt	ttgtatactg	1250
cacatgactt	acacacaaca	tagttccctgc	tcttttaagg	ttacctaaagg	1300
gttgaaactc	taccttcttt	cataagcaca	tgtccgtctc	tgactcagga	1350
tcaaaaacca	aaggatggtt	ttaaacacct	ttgtgaaatt	gtctttttgc	1400
cagaagttaa	aggctgtctc	caagtcctctg	aactcagcag	aaatagacca	1450

tgtgaaaact ccatgcttgg ttagcatctc caactcccta tgtaaataca 1500

caacctgcat aataaataaa aggcaatcat gttata 1536

<210> 462

<211> 273

<212> PRT

<213> Homo Sapien

<400> 462

Met Glu Ala Ala Pro Ser Arg Phe Met Phe Leu Leu Phe Leu Leu
1 5 10 15

Thr Cys Glu Leu Ala Ala Glu Val Ala Ala Glu Val Glu Lys Ser
20 25 30

Ser Asp Gly Pro Gly Ala Ala Gln Glu Pro Thr Trp Leu Thr Asp
35 40 45

Val Pro Ala Ala Met Glu Phe Ile Ala Ala Thr Glu Val Ala Val
50 55 60

Ile Gly Phe Phe Gln Asp Leu Glu Ile Pro Ala Val Pro Ile Leu
65 70 75

His Ser Met Val Gln Lys Phe Pro Gly Val Ser Phe Gly Ile Ser
80 85 90

Thr Asp Ser Glu Val Leu Thr His Tyr Asn Ile Thr Gly Asn Thr
95 100 105

Ile Cys Leu Phe Arg Leu Val Asp Asn Glu Gln Leu Asn Leu Glu
110 115 120

Asp Glu Asp Ile Glu Ser Ile Asp Ala Thr Lys Leu Ser Arg Phe
125 130 135

Ile Glu Ile Asn Ser Leu His Met Val Thr Glu Tyr Asn Pro Val
140 145 150

Thr Val Ile Gly Leu Phe Asn Ser Val Ile Gln Ile His Leu Leu
155 160 165

Leu Ile Met Asn Lys Ala Ser Pro Glu Tyr Glu Glu Asn Met His
170 175 180

Arg Tyr Gln Lys Ala Ala Lys Leu Phe Gln Gly Lys Ile Leu Phe
185 190 195

Ile Leu Val Asp Ser Gly Met Lys Glu Asn Gly Lys Val Ile Ser
200 205 210

Phe Phe Lys Leu Lys Glu Ser Gln Leu Pro Ala Leu Ala Ile Tyr
215 220 225

Gln Thr Leu Asp Asp Glu Trp Asp Thr Leu Pro Thr Ala Glu Val
230 235 240

Ser Val Glu His Val Gln Asn Phe Cys Asp Gly Phe Leu Ser Gly
 245 250 255

Lys Leu Leu Lys Glu Asn Arg Glu Ser Glu Gly Lys Thr Pro Lys
 260 265 270

Val Glu Leu

<210> 463

<211> 764

<212> DNA

<213> Homo Sapien

<400> 463

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 ggcgatgtgg aggggtgcccgc gcacaaccag acgcccagtc acaggcgaga 100
 gccctgggat gcaccggcca gaggccatgc tgctgctgct cacgcttgcc 150
 ctctctggggg gcccacactg ggcagggaag atgtatggcc ctggaggagg 200
 caagtatttc agcaccactg aagactacga ccatgaaatc acagggctgc 250
 ggggtgtctgt aggtcttctc ctggtgaaaa gtgtccagggt gaaacttgga 300
 gactcctggg acgtgaaact gggagcctta ggtgggaata cccaggaagt 350
 caccctgcag ccaggcgaat acatcacaaa agtctttgtc gccttccaag 400
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 gcattggctt tgaatggaat tatccactag aggagccgac cactgagcca 600
 ccagttaatc tcacatactc agcaaactca cccgtgggtc gctaggggtg 650
 ggtatggggc catccgagct gaggccatct gtgtggtggt ggctgatggt 700
 actggagtaa ctgagtcggg acgctgaatc tgaatccacc aataaataaa 750
 gcttctgcag aaaa 764

<210> 464

<211> 178

<212> PRT

<213> Homo Sapien

<400> 464

Met His Arg Pro Glu Ala Met Leu Leu Leu Leu Thr Leu Ala Leu
 1 5 10 15
 Leu Gly Gly Pro Thr Trp Ala Gly Lys Met Tyr Gly Pro Gly Gly
 20 25 30

Gly Lys Tyr Phe Ser Thr Thr Glu Asp Tyr Asp His Glu Ile Thr
35 40 45

Gly Leu Arg Val Ser Val Gly Leu Leu Leu Val Lys Ser Val Gln
50 55 60

Val Lys Leu Gly Asp Ser Trp Asp Val Lys Leu Gly Ala Leu Gly
65 70 75

Gly Asn Thr Gln Glu Val Thr Leu Gln Pro Gly Glu Tyr Ile Thr
80 85 90

Lys Val Phe Val Ala Phe Gln Ala Phe Leu Arg Gly Met Val Met
95 100 105

Tyr Thr Ser Lys Asp Arg Tyr Phe Tyr Phe Gly Lys Leu Asp Gly
110 115 120

Gln Ile Ser Ser Ala Tyr Pro Ser Gln Glu Gly Gln Val Leu Val
125 130 135

Gly Ile Tyr Gly Gln Tyr Gln Leu Leu Gly Ile Lys Ser Ile Gly
140 145 150

Phe Glu Trp Asn Tyr Pro Leu Glu Glu Pro Thr Thr Glu Pro Pro
155 160 165

Val Asn Leu Thr Tyr Ser Ala Asn Ser Pro Val Gly Arg
170 175

<210> 465
<211> 3582
<212> DNA
<213> Homo Sapien

<400> 465
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ggagctcaca gctatgggct ggaggccccg gagagctcgg gggaccccgt 150
tgctgctgct gctactactg ctgctgctct ggccagtgcc aggcgccggg 200
gtgcttcaag gacatatccc tgggcagcca gtcaccccg actgggtcct 250
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gagctggaga agaaccacag gctgctggcc ccaggatata tagaaacca 400
ctacggccca gatgggcagc cagtgggtgct ggcccccaac cacacggatc 450
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 aactgtacat tgtggcagac cacacctgt tcttgactcg gcaccgaaac 800
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 gcttctcagg actctggaca tttaggtggc gctgaccggc ctggaggtgt 900
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 cccagacgtt tacctactgg acggctcacc ctgtgccagg ggcagtggct 1650
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 tcctgccctg tgcagggagg gatgccctgt gtgggaagct gcagtgccag 1850
 ggtggaaagc ccagcctgct cgcaccgcac atggtgccag tggactctac 1900
 cgttcaccta gatggccagg aagtgacttg tcggggagcc ttggcactcc 1950
 ccagtgccca gctggacctg cttggcctgg gcctggtaga gccaggcacc 2000

cagtgtggac	ctagaatggt	gtgccagagc	aggcgctgca	ggaagaatgc	2050
cttccaggag	cttcagcgct	gcctgactgc	ctgccacagc	cacgggggttt	2100
gcaatagcaa	ccataactgc	cactgtgctc	caggctgggc	tccacccttc	2150
tgtgacaagc	caggcttttg	tggcagcatg	gacagtggcc	ctgtgcaggc	2200
tgaaaaccat	gacaccttcc	tgctggccat	gtcctcagc	gtcctgctgc	2250
ctctgtctcc	aggggccggc	ctggcctggt	gttgctaccg	actcccagga	2300
gcccattctgc	agcgatgcag	ctggggctgc	agaagggacc	ctgcgtgcag	2350
tggcccaaaa	gatggcccac	acagggacca	ccccctgggc	ggcgttcacc	2400
ccatggagtt	gggccccaca	gccactggac	agccctggcc	cctggaccct	2450
gagaactctc	atgagcccag	cagccaccct	gagaagcctc	tgccagcagt	2500
ctcgctgac	ccccaaagcag	atcaagtcca	gatgccaaaga	tccctgcctct	2550
ggtgagaggt	agctcctaaa	atgaacagat	ttaaagacag	gtggccactg	2600
acagccactc	caggaacttg	aactgcaggg	gcagagccag	tgaatcacccg	2650
gacctccagc	acctgcaggc	agcttggaag	tttcttcccc	gagtggagct	2700
tcgaccacc	cactccagga	accagagcc	acattagaag	ttcctgaggg	2750
ctggagaaca	ctgcttgggc	acactctcca	gctcaataaa	ccatcagtcc	2800
cagaagcaaa	ggtcacacag	cccctgacct	ccctcaccag	tggaggctgg	2850
gtagtgtctg	ccatcccaaa	agggtcttgt	cctggggagtc	tgggtgtgtct	2900
cctacatgca	atttccacgg	accagctct	gtggagggca	tgactgctgg	2950
ccagaagcta	gtggtcctgg	ggccctatgg	ttcgactgag	tccacactcc	3000
cctgcagcct	ggctggcctc	tgcaaacaaa	cataattttg	gggaccttcc	3050
ttcctgtttc	ttcccaccct	gtcttctccc	ctaggtgggt	cctgagcccc	3100
cacccccaat	cccagtgtcta	cacctgaggt	tctggagctc	agaatctgac	3150
agcctctccc	ccattctgtg	tgtgtccggg	ggacagaggg	aaccatttaa	3200
gaaaagatac	caaagtagaa	gtcaaaagaa	agacatgttg	gctataggcg	3250
tgggtggctca	tgcctataat	cccagcactt	tgggaagccg	gggtaggagg	3300
atcaccagag	gccagcaggt	ccacaccagc	ctgggcaaca	cagcaagaca	3350
ccgcatctac	agaaaaattt	taaaattagc	tgggcgtggg	ggtgtgtacc	3400
tgtaggccta	gctgctcagg	aggctgaagc	aggaggatca	cttgagcctg	3450

agttcaacac tgcagtgagc tatggtggca ccaactgcact ccagcctggg 3500
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 aaaaaaaaaa aaaaaaaaaa aaaaaaagaa aa 3582

<210> 466
 <211> 813
 <212> PRT
 <213> Homo Sapien

<400> 466

Met	Gly	Trp	Arg	Pro	Arg	Arg	Ala	Arg	Gly	Thr	Pro	Leu	Leu	Leu	1	5	10	15
Leu	Leu	Leu	Leu	Leu	Leu	Leu	Trp	Pro	Val	Pro	Gly	Ala	Gly	Val	20	25	30	
Leu	Gln	Gly	His	Ile	Pro	Gly	Gln	Pro	Val	Thr	Pro	His	Trp	Val	35	40	45	
Leu	Asp	Gly	Gln	Pro	Trp	Arg	Thr	Val	Ser	Leu	Glu	Glu	Pro	Val	50	55	60	
Ser	Lys	Pro	Asp	Met	Gly	Leu	Val	Ala	Leu	Glu	Ala	Glu	Gly	Gln	65	70	75	
Glu	Leu	Leu	Leu	Glu	Leu	Glu	Lys	Asn	His	Arg	Leu	Leu	Ala	Pro	80	85	90	
Gly	Tyr	Ile	Glu	Thr	His	Tyr	Gly	Pro	Asp	Gly	Gln	Pro	Val	Val	95	100	105	
Leu	Ala	Pro	Asn	His	Thr	Asp	His	Cys	His	Tyr	Gln	Gly	Arg	Val	110	115	120	
Arg	Gly	Phe	Pro	Asp	Ser	Trp	Val	Val	Leu	Cys	Thr	Cys	Ser	Gly	125	130	135	
Met	Ser	Gly	Leu	Ile	Thr	Leu	Ser	Arg	Asn	Ala	Ser	Tyr	Tyr	Leu	140	145	150	
Arg	Pro	Trp	Pro	Pro	Arg	Gly	Ser	Lys	Asp	Phe	Ser	Thr	His	Glu	155	160	165	
Ile	Phe	Arg	Met	Glu	Gln	Leu	Leu	Thr	Trp	Lys	Gly	Thr	Cys	Gly	170	175	180	
His	Arg	Asp	Pro	Gly	Asn	Lys	Ala	Gly	Met	Thr	Ser	Leu	Pro	Gly	185	190	195	
Gly	Pro	Gln	Ser	Arg	Gly	Arg	Arg	Glu	Ala	Arg	Arg	Thr	Arg	Lys	200	205	210	
Tyr	Leu	Glu	Leu	Tyr	Ile	Val	Ala	Asp	His	Thr	Leu	Phe	Leu	Thr	215	220	225	
Arg	His	Arg	Asn	Leu	Asn	His	Thr	Lys	Gln	Arg	Leu	Leu	Glu	Val				

	230		235		240
Ala Asn Tyr Val	Asp Gln Leu Leu Arg	Thr Leu Asp Ile Gln Val			
	245	250		255	
Ala Leu Thr Gly	Leu Glu Val Trp Thr	Glu Arg Asp Arg Ser Arg			
	260	265		270	
Val Thr Gln Asp	Ala Asn Ala Thr Leu	Trp Ala Phe Leu Gln Trp			
	275	280		285	
Arg Arg Gly Leu	Trp Ala Gln Arg Pro	His Asp Ser Ala Gln Leu			
	290	295		300	
Leu Thr Gly Arg	Ala Phe Gln Gly Ala	Thr Val Gly Leu Ala Pro			
	305	310		315	
Val Glu Gly Met	Cys Arg Ala Glu Ser	Ser Gly Gly Val Ser Thr			
	320	325		330	
Asp His Ser Glu	Leu Pro Ile Gly Ala	Ala Ala Thr Met Ala His			
	335	340		345	
Glu Ile Gly His	Ser Leu Gly Leu Ser	His Asp Pro Asp Gly Cys			
	350	355		360	
Cys Val Glu Ala	Ala Ala Glu Ser Gly	Gly Cys Val Met Ala Ala			
	365	370		375	
Ala Thr Gly His	Pro Phe Pro Arg Val	Phe Ser Ala Cys Ser Arg			
	380	385		390	
Arg Gln Leu Arg	Ala Phe Phe Arg Lys	Gly Gly Gly Ala Cys Leu			
	395	400		405	
Ser Asn Ala Pro	Asp Pro Gly Leu Pro	Val Pro Pro Ala Leu Cys			
	410	415		420	
Gly Asn Gly Phe	Val Glu Ala Gly Glu	Glu Cys Asp Cys Gly Pro			
	425	430		435	
Gly Gln Glu Cys	Arg Asp Leu Cys Cys	Phe Ala His Asn Cys Ser			
	440	445		450	
Leu Arg Pro Gly	Ala Gln Cys Ala His	Gly Asp Cys Cys Val Arg			
	455	460		465	
Cys Leu Leu Lys	Pro Ala Gly Ala Leu	Cys Arg Gln Ala Met Gly			
	470	475		480	
Asp Cys Asp Leu	Pro Glu Phe Cys Thr	Gly Thr Ser Ser His Cys			
	485	490		495	
Pro Pro Asp Val	Tyr Leu Leu Asp Gly	Ser Pro Cys Ala Arg Gly			
	500	505		510	
Ser Gly Tyr Cys	Trp Asp Gly Ala Cys	Pro Thr Leu Glu Gln Gln			
	515	520		525	

Cys	Gln	Gln	Leu	Trp	Gly	Pro	Gly	Ser	His	Pro	Ala	Pro	Glu	Ala	
				530					535					540	
Cys	Phe	Gln	Val	Val	Asn	Ser	Ala	Gly	Asp	Ala	His	Gly	Asn	Cys	
				545					550					555	
Gly	Gln	Asp	Ser	Glu	Gly	His	Phe	Leu	Pro	Cys	Ala	Gly	Arg	Asp	
				560					565					570	
Ala	Leu	Cys	Gly	Lys	Leu	Gln	Cys	Gln	Gly	Gly	Lys	Pro	Ser	Leu	
				575					580					585	
Leu	Ala	Pro	His	Met	Val	Pro	Val	Asp	Ser	Thr	Val	His	Leu	Asp	
				590					595					600	
Gly	Gln	Glu	Val	Thr	Cys	Arg	Gly	Ala	Leu	Ala	Leu	Pro	Ser	Ala	
				605					610					615	
Gln	Leu	Asp	Leu	Leu	Gly	Leu	Gly	Leu	Val	Glu	Pro	Gly	Thr	Gln	
				620					625					630	
Cys	Gly	Pro	Arg	Met	Val	Cys	Gln	Ser	Arg	Arg	Cys	Arg	Lys	Asn	
				635					640					645	
Ala	Phe	Gln	Glu	Leu	Gln	Arg	Cys	Leu	Thr	Ala	Cys	His	Ser	His	
				650					655					660	
Gly	Val	Cys	Asn	Ser	Asn	His	Asn	Cys	His	Cys	Ala	Pro	Gly	Trp	
				665					670					675	
Ala	Pro	Pro	Phe	Cys	Asp	Lys	Pro	Gly	Phe	Gly	Gly	Ser	Met	Asp	
				680					685					690	
Ser	Gly	Pro	Val	Gln	Ala	Glu	Asn	His	Asp	Thr	Phe	Leu	Leu	Ala	
				695					700					705	
Met	Leu	Leu	Ser	Val	Leu	Leu	Pro	Leu	Leu	Pro	Gly	Ala	Gly	Leu	
				710					715					720	
Ala	Trp	Cys	Cys	Tyr	Arg	Leu	Pro	Gly	Ala	His	Leu	Gln	Arg	Cys	
				725					730					735	
Ser	Trp	Gly	Cys	Arg	Arg	Asp	Pro	Ala	Cys	Ser	Gly	Pro	Lys	Asp	
				740					745					750	
Gly	Pro	His	Arg	Asp	His	Pro	Leu	Gly	Gly	Val	His	Pro	Met	Glu	
				755					760					765	
Leu	Gly	Pro	Thr	Ala	Thr	Gly	Gln	Pro	Trp	Pro	Leu	Asp	Pro	Glu	
				770					775					780	
Asn	Ser	His	Glu	Pro	Ser	Ser	His	Pro	Glu	Lys	Pro	Leu	Pro	Ala	
				785					790					795	
Val	Ser	Pro	Asp	Pro	Gln	Ala	Asp	Gln	Val	Gln	Met	Pro	Arg	Ser	
				800					805					810	
Cys	Leu	Trp													

Thr Ser Leu Cys Asn His Asp
95

<210> 469
<211> 1342
<212> DNA
<213> Homo Sapien

<400> 469
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aggtatttgc agttttgctg tctatagttc tatgcacagt aacgctattt 100
cttctacaac taaaattcct caaacctaaa atcaacagct tttatgcctt 150
tgaagtgaag gatgcaaaag gaagaactgt ttctctggaa aagtataaag 200
gcaaagtttc actagttgta aacgtggcca gtgactgcca actcacagac 250
agaaattact tagggctgaa ggaactgcac aaagagtttg gaccatccca 300
cttcagcgtg ttggcttttc cctgcaatca gtttgagaaa tcggagcccc 350
gcccaagcaa ggaagtagaa tcttttgcaa gaaaaaacta cggagtaact 400
ttccccatct tccacaagat taagattcta ggatctgaag gagaacctgc 450
atttagatth cttgttgatt cttcaaagaa ggaaccaagg tggaattttt 500
ggaagtatct tgtcaaccct gagggctcaag ttgtgaagtt ctggaggcca 550
gaggagccca ttgaagtcac caggcctgac atagcagctc tggttagaca 600
agtgatcata aaaaagaaaag aggatctatg agaatgccat tgcgtttcta 650
atagaacaga gaaatgtctc catgaggggt ttgtctcatt ttaaactttt 700
tttttttggg gacagtgtct cactctgtca cccaggctgg agtgcagtag 750
tgcgtttctc gctcattgca acctctgcct ttttaaacat gctattaaat 800
gtggcaatga aggatthttt tttaatgtta tcttgctatt aagtggtaat 850
gaatgttccc aggatgagga tgttacccaa agcaaaaatc aagagtagcc 900
aaagaatcaa catgaaatat attactact tcctctgacc atactaaaga 950
attcagaata cacagtgacc aatgtgcctc aatatcttat tgttcaactt 1000
gacattttct aggactgtac ttgatgaaaa tgccaacaca ctagaccact 1050
ctttggattc aagagcactg tgtatgactg aaatttctgg aataactgta 1100
aatggttatg ttaatggaat aaaacacaaa tgttgaaaaa tgtaaaatat 1150
atatacatag attcaaatcc ttatatatgt atgcttgttt tgtgtacagg 1200
atthttgttt ttctthttta gtacaggttc ctagtgtttt actataactg 1250

tcactatgta tgtaactgac atatataaat agtcatttat aaatgaccgt 1300

attataacat ttgaaaaagt cttcatcaaa aaaaaaaaaa aa 1342

<210> 470

<211> 209

<212> PRT

<213> Homo Sapien

<400> 470

Met	Glu	Pro	Leu	Ala	Ala	Tyr	Pro	Leu	Lys	Cys	Ser	Gly	Pro	Arg
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Ala	Lys	Val	Phe	Ala	Val	Leu	Leu	Ser	Ile	Val	Leu	Cys	Thr	Val
				20					25					30

Thr	Leu	Phe	Leu	Leu	Gln	Leu	Lys	Phe	Leu	Lys	Pro	Lys	Ile	Asn
				35					40					45

Ser	Phe	Tyr	Ala	Phe	Glu	Val	Lys	Asp	Ala	Lys	Gly	Arg	Thr	Val
				50					55					60

Ser	Leu	Glu	Lys	Tyr	Lys	Gly	Lys	Val	Ser	Leu	Val	Val	Asn	Val
				65					70					75

Ala	Ser	Asp	Cys	Gln	Leu	Thr	Asp	Arg	Asn	Tyr	Leu	Gly	Leu	Lys
				80					85					90

Glu	Leu	His	Lys	Glu	Phe	Gly	Pro	Ser	His	Phe	Ser	Val	Leu	Ala
				95					100					105

Phe	Pro	Cys	Asn	Gln	Phe	Gly	Glu	Ser	Glu	Pro	Arg	Pro	Ser	Lys
				110					115					120

Glu	Val	Glu	Ser	Phe	Ala	Arg	Lys	Asn	Tyr	Gly	Val	Thr	Phe	Pro
				125					130					135

Ile	Phe	His	Lys	Ile	Lys	Ile	Leu	Gly	Ser	Glu	Gly	Glu	Pro	Ala
				140					145					150

Phe	Arg	Phe	Leu	Val	Asp	Ser	Ser	Lys	Lys	Glu	Pro	Arg	Trp	Asn
				155					160					165

Phe	Trp	Lys	Tyr	Leu	Val	Asn	Pro	Glu	Gly	Gln	Val	Val	Lys	Phe
				170					175					180

Trp	Arg	Pro	Glu	Glu	Pro	Ile	Glu	Val	Ile	Arg	Pro	Asp	Ile	Ala
				185					190					195

Ala	Leu	Val	Arg	Gln	Val	Ile	Ile	Lys	Lys	Lys	Glu	Asp	Leu	
				200					205					

<210> 471

<211> 2594

<212> DNA

<213> Homo Sapien

<400> 471

[illegible]

Lys	Pro	Gly	Asp	Gln	Ile	Leu	Asp	Trp	Gln	Tyr	Gly	Val	Thr	Gln	
				35					40					45	
Ala	Phe	Pro	His	Thr	Glu	Glu	Glu	Val	Glu	Val	Asp	Ser	His	Ala	
				50					55					60	
Tyr	Ser	His	Arg	Trp	Lys	Arg	Asn	Leu	Asp	Phe	Leu	Lys	Ala	Val	
				65					70					75	
Asp	Thr	Asn	Arg	Ala	Ser	Val	Gly	Gln	Asp	Ser	Pro	Glu	Pro	Arg	
				80					85					90	
Ser	Phe	Thr	Asp	Leu	Leu	Leu	Asp	Asp	Gly	Gln	Asp	Asn	Asn	Thr	
				95					100					105	
Gln	Ile	Glu	Glu	Asp	Thr	Asp	His	Asn	Tyr	Tyr	Ile	Ser	Arg	Ile	
				110					115					120	
Tyr	Gly	Pro	Ser	Asp	Ser	Ala	Ser	Arg	Asp	Leu	Trp	Val	Asn	Ile	
				125					130					135	
Asp	Gln	Met	Glu	Lys	Asp	Lys	Val	Lys	Ile	His	Gly	Ile	Leu	Ser	
				140					145					150	
Asn	Thr	His	Arg	Gln	Ala	Ala	Arg	Val	Asn	Leu	Ser	Phe	Asp	Phe	
				155					160					165	
Pro	Phe	Tyr	Gly	His	Phe	Leu	Arg	Glu	Ile	Thr	Val	Ala	Thr	Gly	
				170					175					180	
Gly	Phe	Ile	Tyr	Thr	Gly	Glu	Val	Val	His	Arg	Met	Leu	Thr	Ala	
				185					190					195	
Thr	Gln	Tyr	Ile	Ala	Pro	Leu	Met	Ala	Asn	Phe	Asp	Pro	Ser	Val	
				200					205					210	
Ser	Arg	Asn	Ser	Thr	Val	Arg	Tyr	Phe	Asp	Asn	Gly	Thr	Ala	Leu	
				215					220					225	
Val	Val	Gln	Trp	Asp	His	Val	His	Leu	Gln	Asp	Asn	Tyr	Asn	Leu	
				230					235					240	
Gly	Ser	Phe	Thr	Phe	Gln	Ala	Thr	Leu	Leu	Met	Asp	Gly	Arg	Ile	
				245					250					255	
Ile	Phe	Gly	Tyr	Lys	Glu	Ile	Pro	Val	Leu	Val	Thr	Gln	Ile	Ser	
				260					265					270	
Ser	Thr	Asn	His	Pro	Val	Lys	Val	Gly	Leu	Ser	Asp	Ala	Phe	Val	
				275					280					285	
Val	Val	His	Arg	Ile	Gln	Gln	Ile	Pro	Asn	Val	Arg	Arg	Arg	Thr	
				290					295					300	
Ile	Tyr	Glu	Tyr	His	Arg	Val	Glu	Leu	Gln	Met	Ser	Lys	Ile	Thr	
				305					310					315	
Asn	Ile	Ser	Ala	Val	Glu	Met	Thr	Pro	Leu	Pro	Thr	Cys	Leu	Gln	

320	325	330
Phe Asn Arg Cys Gly Pro Cys Val Ser Ser Gln Ile Gly Phe Asn		
335	340	345
Cys Ser Trp Cys Ser Lys Leu Gln Arg Cys Ser Ser Gly Phe Asp		
350	355	360
Arg His Arg Gln Asp Trp Val Asp Ser Gly Cys Pro Glu Glu Ser		
365	370	375
Lys Glu Lys Met Cys Glu Asn Thr Glu Pro Val Glu Thr Ser Ser		
380	385	390
Arg Thr Thr Thr Thr Val Gly Ala Thr Thr Thr Gln Phe Arg Val		
395	400	405
Leu Thr Thr Thr Arg Arg Ala Val Thr Ser Gln Phe Pro Thr Ser		
410	415	420
Leu Pro Thr Glu Asp Asp Thr Lys Ile Ala Leu His Leu Lys Asp		
425	430	435
Asn Gly Ala Ser Thr Asp Asp Ser Ala Ala Glu Lys Lys Gly Gly		
440	445	450
Thr Leu His Ala Gly Leu Ile Ile Gly Ile Leu Ile Leu Val Leu		
455	460	465
Ile Val Ala Thr Ala Ile Leu Val Thr Val Tyr Met Tyr His His		
470	475	480
Pro Thr Ser Ala Ala Ser Ile Phe Phe Ile Glu Arg Arg Pro Ser		
485	490	495
Arg Trp Pro Ala Met Lys Phe Arg Arg Gly Ser Gly His Pro Ala		
500	505	510
Tyr Ala Glu Val Glu Pro Val Gly Glu Lys Glu Gly Phe Ile Val		
515	520	525
Ser Glu Gln Cys		

<210> 473
 <211> 2870
 <212> DNA
 <213> Homo Sapien

<400> 473
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 ccatgcaacc ccgcgccttg cgccttaacc aggactgctc cgcgcgcccc 100
 tgagcctcgg gctccggccc ggacctgcag cctcccaggt ggctgggaag 150
 aactctccaa caataaatac atttgataag aaagatggct ttaaaagtgc 200

tactagaaca agagaaaacg tttttcactc ttttagtatt actaggctat 250
 ttgtcatgta aagtgacttg tgaatcagga gactgtagac agcaagaatt 300
 cagggatcgg tctggaaact gtgttccctg caaccagtgt gggccaggca 350
 tggagttgtc taaggaatgt ggcttcggct atggggagga tgcacagtgt 400
 gtgacgtgcc ggctgcacag gttcaaggag gactggggct tccagaaatg 450
 caagccctgt ctggactgcg cagtggtgaa ccgctttcag aaggcaaatt 500
 gttcagccac cagtgatgcc atctgcgggg actgcttgcc aggattttat 550
 aggaagacga aacttgctcg ctttcaagac atggagtgtg tgccttgtgg 600
 agaccctcct cctccttacg aaccgcactg tgccagcaag gtcaacctcg 650
 tgaagatcgc gtccacggcc tccagcccac gggacacggc gctggctgcc 700
 gttatctgca gcgctctggc caccgtcctg ctggccctgc tcatcctctg 750
 tgtcatctat tgtaagagac agtttatgga gaagaaaccc agctggtctc 800
 tgcggtcgca ggacattcag tacaacggct ctgagctgtc gtgttttgac 850
 agacctcagc tccacgaata tgcccacaga gcctgctgcc agtgccgccg 900
 tgactcagtg cagacctgcg ggccggtgcg cttgctccca tccatgtgct 950
 gtgaggagge ctgcagcccc aaccggcgga ctcttggttg tggggtgcat 1000
 tctgcagcca gtcttcagge aagaaacgca ggcccagccg gggagatggg 1050
 gccgactttc ttcggatccc tcacgcagtc catctgtggc gagttttcag 1100
 atgcctggcc tctgatgcag aatcccatgg gtggtgacaa catctctttt 1150
 tgtgactctt atcctgaact cactggagaa gacattcatt ctctcaatcc 1200
 agaacttgaa agctcaacgt ctttggattc aaatagcagt caagatttgg 1250
 ttggtggggc tgttccagtc cagtctcatt ctgaaaactt tacagcagct 1300
 actgatttat ctagatataa caacacactg gtagaatcag catcaactca 1350
 ggatgcacta actatgagaa gccagctaga tcaggagagt ggcgctgtca 1400
 tccaccacgc cactcagacg tccctccagg aagcttaaag aacctgcttc 1450
 tttctgcagt agaagcgtgt gctggaaccc aaagagtact cctttgttag 1500
 gcttatggac tgagcagtct ggaccttgca tggcttctgg ggcaaaaata 1550
 aatctgaacc aaactgacgg catttgaagc ctttcagcca gttgcttctg 1600
 agccagacca gctgtaagct gaaacctcaa tgaataacaa gaaaagactc 1650

Leu	Leu	Val	Leu	Leu	Gly	Tyr	Leu	Ser	Cys	Lys	Val	Thr	Cys	Glu			
				20					25					30			
Ser	Gly	Asp	Cys	Arg	Gln	Gln	Glu	Phe	Arg	Asp	Arg	Ser	Gly	Asn			
				35					40					45			
Cys	Val	Pro	Cys	Asn	Gln	Cys	Gly	Pro	Gly	Met	Glu	Leu	Ser	Lys			
				50					55					60			
Glu	Cys	Gly	Phe	Gly	Tyr	Gly	Glu	Asp	Ala	Gln	Cys	Val	Thr	Cys			
				65					70					75			
Arg	Leu	His	Arg	Phe	Lys	Glu	Asp	Trp	Gly	Phe	Gln	Lys	Cys	Lys			
				80					85					90			
Pro	Cys	Leu	Asp	Cys	Ala	Val	Val	Asn	Arg	Phe	Gln	Lys	Ala	Asn			
				95					100					105			
Cys	Ser	Ala	Thr	Ser	Asp	Ala	Ile	Cys	Gly	Asp	Cys	Leu	Pro	Gly			
				110					115					120			
Phe	Tyr	Arg	Lys	Thr	Lys	Leu	Val	Gly	Phe	Gln	Asp	Met	Glu	Cys			
				125					130					135			
Val	Pro	Cys	Gly	Asp	Pro	Pro	Pro	Pro	Tyr	Glu	Pro	His	Cys	Ala			
				140					145					150			
Ser	Lys	Val	Asn	Leu	Val	Lys	Ile	Ala	Ser	Thr	Ala	Ser	Ser	Pro			
				155					160					165			
Arg	Asp	Thr	Ala	Leu	Ala	Ala	Val	Ile	Cys	Ser	Ala	Leu	Ala	Thr			
				170					175					180			
Val	Leu	Leu	Ala	Leu	Leu	Ile	Leu	Cys	Val	Ile	Tyr	Cys	Lys	Arg			
				185					190					195			
Gln	Phe	Met	Glu	Lys	Lys	Pro	Ser	Trp	Ser	Leu	Arg	Ser	Gln	Asp			
				200					205					210			
Ile	Gln	Tyr	Asn	Gly	Ser	Glu	Leu	Ser	Cys	Phe	Asp	Arg	Pro	Gln			
				215					220					225			
Leu	His	Glu	Tyr	Ala	His	Arg	Ala	Cys	Cys	Gln	Cys	Arg	Arg	Asp			
				230					235					240			
Ser	Val	Gln	Thr	Cys	Gly	Pro	Val	Arg	Leu	Leu	Pro	Ser	Met	Cys			
				245					250					255			
Cys	Glu	Glu	Ala	Cys	Ser	Pro	Asn	Pro	Ala	Thr	Leu	Gly	Cys	Gly			
				260					265					270			
Val	His	Ser	Ala	Ala	Ser	Leu	Gln	Ala	Arg	Asn	Ala	Gly	Pro	Ala			
				275					280					285			
Gly	Glu	Met	Val	Pro	Thr	Phe	Phe	Gly	Ser	Leu	Thr	Gln	Ser	Ile			
				290					295					300			
Cys	Gly	Glu	Phe	Ser	Asp	Ala	Trp	Pro	Leu	Met	Gln	Asn	Pro	Met			

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Gly Glu Asp Ile His Ser Leu Asn Pro Glu Leu Glu Ser Ser Thr					
	335		340		345
Ser Leu Asp Ser Asn Ser Ser Gln Asp Leu Val Gly Gly Ala Val					
	350		355		360
Pro Val Gln Ser His Ser Glu Asn Phe Thr Ala Ala Thr Asp Leu					
	365		370		375
Ser Arg Tyr Asn Asn Thr Leu Val Glu Ser Ala Ser Thr Gln Asp					
	380		385		390
Ala Leu Thr Met Arg Ser Gln Leu Asp Gln Glu Ser Gly Ala Val					
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 <212> DNA
 <213> Homo Sapien

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<210> 476

<211> 251

<212> PRT

<213> Homo Sapien

<400> 476

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Phe	Glu	His	Thr	Tyr	Phe	Gly	Pro	Phe	Asp	Leu	Arg	Ala	Met	Lys	35	40	45	
Leu	Pro	Ser	Ile	Ser	Cys	Pro	His	Glu	Cys	Phe	Glu	Ala	Ile	Leu	50	55	60	
Ser	Leu	Asp	Thr	Gly	Tyr	Arg	Ala	Pro	Val	Thr	Leu	Val	Arg	Lys	65	70	75	
Gly	Cys	Trp	Thr	Gly	Pro	Pro	Ala	Gly	Gln	Thr	Gln	Ser	Asn	Pro	80	85	90	
Asp	Ala	Leu	Pro	Pro	Asp	Tyr	Ser	Val	Val	Arg	Gly	Cys	Thr	Thr	95	100	105	
Asp	Lys	Cys	Asn	Ala	His	Leu	Met	Thr	His	Asp	Ala	Leu	Pro	Asn	110	115	120	
Leu	Ser	Gln	Ala	Pro	Asp	Pro	Pro	Thr	Leu	Ser	Gly	Ala	Glu	Cys	125	130	135	
Tyr	Ala	Cys	Ile	Gly	Val	His	Gln	Asp	Asp	Cys	Ala	Ile	Gly	Arg	140	145	150	
Ser	Arg	Arg	Val	Gln	Cys	His	Gln	Asp	Gln	Thr	Ala	Cys	Phe	Gln	155	160	165	
Gly	Ser	Gly	Arg	Met	Thr	Val	Gly	Asn	Phe	Ser	Val	Pro	Val	Tyr	170	175	180	
Ile	Arg	Thr	Cys	His	Arg	Pro	Ser	Cys	Thr	Thr	Glu	Gly	Thr	Thr	185	190	195	
Ser	Pro	Trp	Thr	Ala	Ile	Asp	Leu	Gln	Gly	Ser	Cys	Cys	Glu	Gly	200	205	210	
Tyr	Leu	Cys	Asn	Arg	Lys	Ser	Met	Thr	Gln	Pro	Phe	Thr	Ser	Ala	215	220	225	

Ser Ala Thr Thr Pro Pro Arg Ala Leu Gln Val Leu Ala Leu Leu
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Leu Pro Val Leu Leu Leu Val Gly Leu Ser Ala
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<210> 477

<211> 3288

<212> DNA

<213> Homo Sapien

<400> 477

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<210> 478

<211> 800

<212> PRT

<213> Homo Sapien

<400> 478

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Phe	Leu	Phe	Leu	Phe	Trp	Gly	Val	Ser	Leu	Ala	Gly	Ser	Gly	Phe
				20					25				30	
Gly	Arg	Tyr	Ser	Val	Thr	Glu	Glu	Thr	Glu	Lys	Gly	Ser	Phe	Val
				35					40				45	
Val	Asn	Leu	Ala	Lys	Asp	Leu	Gly	Leu	Ala	Glu	Gly	Glu	Leu	Ala
				50					55				60	
Ala	Arg	Gly	Thr	Arg	Val	Val	Ser	Asp	Asp	Asn	Lys	Gln	Tyr	Leu
				65					70				75	
Leu	Leu	Asp	Ser	His	Thr	Gly	Asn	Leu	Leu	Thr	Asn	Glu	Lys	Leu
				80					85				90	
Asp	Arg	Glu	Lys	Leu	Cys	Gly	Pro	Lys	Glu	Pro	Cys	Met	Leu	Tyr
				95					100				105	
Phe	Gln	Ile	Leu	Met	Asp	Asp	Pro	Phe	Gln	Ile	Tyr	Arg	Ala	Glu
				110					115				120	

Leu Arg Val Arg	Asp Ile Asn Asp His	Ala Pro Val Phe Gln Asp	125	130	135
Lys Glu Thr Val	Leu Lys Ile Ser Glu	Asn Thr Ala Glu Gly Thr	140	145	150
Ala Phe Arg Leu	Glu Arg Ala Gln Asp	Pro Asp Gly Gly Leu Asn	155	160	165
Gly Ile Gln Asn	Tyr Thr Ile Ser Pro	Asn Ser Phe Phe His Ile	170	175	180
Asn Ile Ser Gly	Gly Asp Glu Gly Met	Ile Tyr Pro Glu Leu Val	185	190	195
Leu Asp Lys Ala	Leu Asp Arg Glu Glu	Gln Gly Glu Leu Ser Leu	200	205	210
Thr Leu Thr Ala	Leu Asp Gly Gly Ser	Pro Ser Arg Ser Gly Thr	215	220	225
Ser Thr Val Arg	Ile Val Val Leu Asp	Val Asn Asp Asn Ala Pro	230	235	240
Gln Phe Ala Gln	Ala Leu Tyr Glu Thr	Gln Ala Pro Glu Asn Ser	245	250	255
Pro Ile Gly Phe	Leu Ile Val Lys Val	Trp Ala Glu Asp Val Asp	260	265	270
Ser Gly Val Asn	Ala Glu Val Ser Tyr	Ser Phe Phe Asp Ala Ser	275	280	285
Glu Asn Ile Arg	Thr Thr Phe Gln Ile	Asn Pro Phe Ser Gly Glu	290	295	300
Ile Phe Leu Arg	Glu Leu Leu Asp Tyr	Glu Leu Val Asn Ser Tyr	305	310	315
Lys Ile Asn Ile	Gln Ala Met Asp Gly	Gly Gly Leu Ser Ala Arg	320	325	330
Cys Arg Val Leu	Val Glu Val Leu Asp	Thr Asn Asp Asn Pro Pro	335	340	345
Glu Leu Ile Val	Ser Ser Phe Ser Asn	Ser Val Ala Glu Asn Ser	350	355	360
Pro Glu Thr Pro	Leu Ala Val Phe Lys	Ile Asn Asp Arg Asp Ser	365	370	375
Gly Glu Asn Gly	Lys Met Val Cys Tyr	Ile Gln Glu Asn Leu Pro	380	385	390
Phe Leu Leu Lys	Pro Ser Val Glu Asn	Phe Tyr Ile Leu Ile Thr	395	400	405
Glu Gly Ala Leu	Asp Arg Glu Ile Arg	Ala Glu Tyr Asn Ile Thr			

Ser Val Leu Leu Phe Val Ala Val Arg Leu Cys Arg Arg Ser Arg
710 715 720

Ala Ala Ser Val Gly Arg Cys Ser Val Pro Glu Gly Pro Phe Pro
725 730 735

Gly His Leu Val Asp Val Arg Gly Ala Glu Thr Leu Ser Gln Ser
740 745 750

Tyr Gln Tyr Glu Val Cys Leu Thr Gly Gly Pro Gly Thr Ser Glu
755 760 765

Phe Lys Phe Leu Lys Pro Val Ile Ser Asp Ile Gln Ala Gln Gly
770 775 780

Pro Gly Arg Lys Gly Glu Glu Asn Ser Thr Phe Arg Asn Ser Phe
785 790 795

Gly Phe Asn Ile Gln
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<210> 479
<211> 1470
<212> DNA
<213> Homo Sapien

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<210> 480

<211> 248

<212> PRT

<213> Homo Sapien

<400> 480

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Val	His	Glu	Ala	Trp	Ala	Gly	Met	Leu	Lys	Glu	Glu	Asp	Asp	Asp
				20				25						30
Thr	Glu	Arg	Leu	Pro	Ser	Lys	Cys	Glu	Val	Cys	Lys	Leu	Leu	Ser
				35				40						45
Thr	Glu	Leu	Gln	Ala	Glu	Leu	Ser	Arg	Thr	Gly	Arg	Ser	Arg	Glu
				50				55						60
Val	Leu	Glu	Leu	Gly	Gln	Val	Leu	Asp	Thr	Gly	Lys	Arg	Lys	Arg
				65				70						75
His	Val	Pro	Tyr	Ser	Val	Ser	Glu	Thr	Arg	Leu	Glu	Glu	Ala	Leu
				80				85						90
Glu	Asn	Leu	Cys	Glu	Arg	Ile	Leu	Asp	Tyr	Ser	Val	His	Ala	Glu
				95				100						105
Arg	Lys	Gly	Ser	Leu	Arg	Tyr	Ala	Lys	Gly	Gln	Ser	Gln	Thr	Met
				110				115						120

Ala Thr Leu Lys Gly Leu Val Gln Lys Gly Val Lys Val Asp Leu	125	130	135
Gly Ile Pro Leu Glu Leu Trp Asp Glu Pro Ser Val Glu Val Thr	140	145	150
Tyr Leu Lys Lys Gln Cys Glu Thr Met Leu Glu Glu Phe Glu Asp	155	160	165
Ile Val Gly Asp Trp Tyr Phe His His Gln Glu Gln Pro Leu Gln	170	175	180
Asn Phe Leu Cys Glu Gly His Val Leu Pro Ala Ala Glu Thr Ala	185	190	195
Cys Leu Gln Glu Thr Trp Thr Gly Lys Glu Ile Thr Asp Gly Glu	200	205	210
Glu Lys Thr Glu Gly Glu Glu Glu Gln Glu Glu Glu Glu Glu	215	220	225
Glu Glu Glu Glu Gly Gly Asp Lys Met Thr Lys Thr Gly Ser His	230	235	240
Pro Lys Leu Asp Arg Glu Asp Leu	245		

<210> 481
 <211> 1786
 <212> DNA
 <213> Homo Sapien

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<210> 482

<211> 234

<212> PRT

<213> Homo Sapien

<400> 482

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			20					25					30	

Ser	Cys	Ala	Ala	Glu	Gly	Ser	Pro	Gly	Thr	Pro	Asp	Glu	Ser	Thr	35	40	45
Pro	Pro	Pro	Arg	Lys	Lys	Lys	Lys	Asp	Ile	Arg	Asp	Tyr	Asn	Asp	50	55	60
Ala	Asp	Met	Ala	Arg	Leu	Leu	Glu	Gln	Trp	Glu	Lys	Asp	Asp	Asp	65	70	75
Ile	Glu	Glu	Gly	Asp	Leu	Pro	Glu	His	Lys	Arg	Pro	Ser	Ala	Pro	80	85	90
Val	Asp	Phe	Ser	Lys	Ile	Asp	Pro	Ser	Lys	Pro	Glu	Ser	Ile	Leu	95	100	105
Lys	Met	Thr	Lys	Lys	Gly	Lys	Thr	Leu	Met	Met	Phe	Val	Thr	Val	110	115	120
Ser	Gly	Ser	Pro	Thr	Glu	Lys	Glu	Thr	Glu	Glu	Ile	Thr	Ser	Leu	125	130	135
Trp	Gln	Gly	Ser	Leu	Phe	Asn	Ala	Asn	Tyr	Asp	Val	Gln	Arg	Phe	140	145	150
Ile	Val	Gly	Ser	Asp	Arg	Ala	Ile	Phe	Met	Leu	Arg	Asp	Gly	Ser	155	160	165
Tyr	Ala	Trp	Glu	Ile	Lys	Asp	Phe	Leu	Val	Gly	Gln	Asp	Arg	Cys	170	175	180
Ala	Asp	Val	Thr	Leu	Glu	Gly	Gln	Val	Tyr	Pro	Gly	Lys	Gly	Gly	185	190	195
Gly	Ser	Lys	Glu	Lys	Asn	Lys	Thr	Lys	Gln	Asp	Lys	Gly	Lys	Lys	200	205	210
Lys	Lys	Glu	Gly	Asp	Leu	Lys	Ser	Arg	Ser	Ser	Lys	Glu	Glu	Asn	215	220	225
Arg	Ala	Gly	Asn	Lys	Arg	Glu	Asp	Leu							230		

<210> 483
 <211> 2379
 <212> DNA .
 <213> Homo Sapien

<400> 483
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 cgggccacca tggcgctgcc tccaggccca gccgccctcc ggcacacact 100
 gctgctcctg ccagcccttc tgagctcagg ttggggggag ttggagccac 150
 aaatagatgg tcagacctgg gctgagcggg cacttcggga gaatgaacgc 200
 cagccttca cctgccgggt ggcagggggg cctggcaccc ccagattggc 250

Ser Val Ile Leu Asn Val Gln Phe Lys Pro Glu Ile Ala Gln Val
125 130 135

Gly Ala Lys Tyr Gln Glu Ala Gln Gly Pro Gly Leu Leu Val Val
140 145 150

Leu Phe Ala Leu Val Arg Ala Asn Pro Pro Ala Asn Val Thr Trp
155 160 165

Ile Asp Gln Asp Gly Pro Val Thr Val Asn Thr Ser Asp Phe Leu
170 175 180

Val Leu Asp Ala Gln Asn Tyr Pro Trp Leu Thr Asn His Thr Val
185 190 195

Gln Leu Gln Leu Arg Ser Leu Ala His Asn Leu Ser Val Val Ala
200 205 210

Thr Asn Asp Val Gly Val Thr Ser Ala Ser Leu Pro Ala Pro Gly
215 220 225

Pro Ser Arg His Pro Ser Leu Ile Ser Ser Asp Ser Asn Asn Leu
230 235 240

Lys Leu Asn Asn Val Arg Leu Pro Arg Glu Asn Met Ser Leu Pro
245 250 255

Ser Asn Leu Gln Leu Asn Asp Leu Thr Pro Asp Ser Arg Ala Val
260 265 270

Lys Pro Ala Asp Arg Gln Met Ala Gln Asn Asn Ser Arg Pro Glu
275 280 285

Leu Leu Asp Pro Glu Pro Gly Gly Leu Leu Thr Ser Gln Gly Phe
290 295 300

Ile Arg Leu Pro Val Leu Gly Tyr Ile Tyr Arg Val Ser Ser Val
305 310 315

Ser Ser Asp Glu Ile Trp Leu
320

<210> 485
<211> 539
<212> DNA
<213> Homo Sapien

<400> 485
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tttacttcga cgattttggg aacatacgtt gaagctgggtg ccgctaagtc 200
taacgaagaa gagattgtga acaaaagcga atttggaaga tttccacgag 250

ggtcgagaaa ggatgcatcg ggggtgccaca agccgggcta ccctgtaccc 300
 cctcattctc gctgccctcc acctcccat gtgcagcgtc ctgcctctat 350
 tctgcatgct tagtctaaca ccatcaggct cgtttatctt ttctgtcatt 400
 gatctcacca ggagcaaata actagtgcgt gcttctgatt cacgtaacgt 450
 agtatgtaaa taaatgtcag tgatattatg aattggtaaa acatttctgt 500
 tatctaaata aaacagtga gtttgtttga ctaaaaaaa 539

<210> 486
 <211> 84
 <212> PRT
 <213> Homo Sapien

<400> 486
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 1 5 10 15
 Thr Ser Thr Ile Leu Gly Thr Tyr Val Glu Ala Gly Ala Ala Lys
 20 25 30
 Ser Asn Glu Glu Glu Ile Val Asn Lys Ser Glu Phe Gly Arg Phe
 35 40 45
 Pro Arg Gly Ser Arg Lys Asp Ala Ser Gly Cys His Lys Pro Gly
 50 55 60
 Tyr Pro Val Pro Pro His Ser Arg Cys Pro Pro Pro Pro His Val
 65 70 75
 Gln Arg Pro Arg Pro Ile Leu His Ala
 80

<210> 487
 <211> 843
 <212> DNA
 <213> Homo Sapien

<400> 487
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 tgctgctggc gctgttagtg ccgggcggtg gtgccgcaa gaccggtgcg 150
 gagctcgtga cctgcgggtc ggtgctgaag ctgctcaata cgcaccaccg 200
 cgtgcggctg cactcgcacg acatcaaata cggatccggc agcggccagc 250
 aatcggtgac cggcgtagag gcgtcggacg acgccaatag ctactggcgg 300
 atccgcggcg gctcggaggg cgggtgcccg gcgggggtccc cgggtgcgctg 350
 cgggcaggcg gtgaggctca cgcatgtgct tacgggcaag aacctgcaca 400

cgcaccactt cccgtcgccg ctgtccaaca accaggaggt gagtgccttt 450
 ggggaagacg gcgagggcga cgacctggac ctatggacag tgcgctgctc 500
 tggacagcac tgggagcgtg aggctgctgt gcgcttccag catgtgggca 550
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 gggcagcatg aggtccacgg catgcccagt gccaacacgc acaatacgtg 650
 gaaggccatg gaaggcatct tcatcaagcc tagtgtggag ccctctgcag 700
 gtcacgatga actctgagtg tgtggatgga tgggtggatg gaggggtggca 750
 ggtggggcgt ctgcagggcc actcttggca gagactttgg gtttgtaggg 800
 gtcctcaagt gcctttgtga ttaaagaatg ttggtctatg aaa 843

<210> 488

<211> 221

<212> PRT

<213> Homo Sapien

<400> 488

Met	Trp	Ser	Ala	Gly	Arg	Gly	Gly	Ala	Ala	Trp	Pro	Val	Leu	Leu	1	5	10	15
Gly	Leu	Leu	Leu	Ala	Leu	Leu	Val	Pro	Gly	Gly	Gly	Ala	Ala	Lys	20	25	30	
Thr	Gly	Ala	Glu	Leu	Val	Thr	Cys	Gly	Ser	Val	Leu	Lys	Leu	Leu	35	40	45	
Asn	Thr	His	His	Arg	Val	Arg	Leu	His	Ser	His	Asp	Ile	Lys	Tyr	50	55	60	
Gly	Ser	Gly	Ser	Gly	Gln	Gln	Ser	Val	Thr	Gly	Val	Glu	Ala	Ser	65	70	75	
Asp	Asp	Ala	Asn	Ser	Tyr	Trp	Arg	Ile	Arg	Gly	Gly	Ser	Glu	Gly	80	85	90	
Gly	Cys	Pro	Arg	Gly	Ser	Pro	Val	Arg	Cys	Gly	Gln	Ala	Val	Arg	95	100	105	
Leu	Thr	His	Val	Leu	Thr	Gly	Lys	Asn	Leu	His	Thr	His	His	Phe	110	115	120	
Pro	Ser	Pro	Leu	Ser	Asn	Asn	Gln	Glu	Val	Ser	Ala	Phe	Gly	Glu	125	130	135	
Asp	Gly	Glu	Gly	Asp	Asp	Leu	Asp	Leu	Trp	Thr	Val	Arg	Cys	Ser	140	145	150	
Gly	Gln	His	Trp	Glu	Arg	Glu	Ala	Ala	Val	Arg	Phe	Gln	His	Val	155	160	165	
Gly	Thr	Ser	Val	Phe	Leu	Ser	Val	Thr	Gly	Glu	Gln	Tyr	Gly	Ser				

Pro	Ile	Arg	Gly	Gln	His	Glu	Val	His	Gly	Met	Pro	Ser	Ala	Asn
			185						190					195
Thr	His	Asn	Thr	Trp	Lys	Ala	Met	Glu	Gly	Ile	Phe	Ile	Lys	Pro
			200						205					210
Ser	Val	Glu	Pro	Ser	Ala	Gly	His	Asp	Glu	Leu				
			215						220					

<210> 489
 <211> 3322
 <212> DNA
 <213> Homo Sapien

<400> 489
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 cttttcctgt gcctgtgcct tctgactttg cagaatgcaa caacagagac 150
 atgggaagaa ctctgagct acatggagaa tatgcaggtg tccaggggcc 200
 ggagctcagt tttttcctct cgtcaactcc accagctgga gcagatgcta 250
 ctgaacacca gcttcccagg ctacaactg accttgaga caccaccat 300
 ccagtctctg gccttcaagc tgagctgtga cttctctggc ctctcgtga 350
 ccagtgccac tctgaagcgg gtgccccagg caggaggtca gcatgcccg 400
 ggtcagcacg ccatgcagtt ccccgccgag ctgaccggg acgcctgcaa 450
 gacccgcccc agggagctgc ggctcatctg tatctacttc tccaacaccc 500
 actttttcaa ggatgaaaac aactcatctc tgctgaataa ctacgtcctg 550
 ggggcccagc tgagtcatgg gcacgtgaac aacctcagg atcctgtgaa 600
 catcagcttc tggcacaacc aaagcctgga aggctacacc ctgacctgtg 650
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 gagggctgtc gtacagagca gccctccac tctcaggtgc tctgccgctg 750
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 agcatctcca tcgtggcctc gctgatcaca gtctgctgc acttccattt 900
 caggaagcag agtgactcct taacacgtat ccacatgaac ctgcatgcct 950
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cgcgctgctc agctgcctca cctggatggc catcgagggc ttcaacctct 1100
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 cagcctctgt gtgcctcagt tttcctattt gtaaaataga gaccatagtg 3250
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 cagagtaagt gctcagtaaa aa 3322

<210> 490

<211> 528

<212> PRT

<213> Homo Sapien

<400> 490

Met	Asp	His	Cys	Gly	Ala	Leu	Phe	Leu	Cys	Leu	Cys	Leu	Leu	Thr
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Leu	Gln	Asn	Ala	Thr	Thr	Glu	Thr	Trp	Glu	Glu	Leu	Leu	Ser	Tyr
				20					25					30
Met	Glu	Asn	Met	Gln	Val	Ser	Arg	Gly	Arg	Ser	Ser	Val	Phe	Ser
				35					40					45
Ser	Arg	Gln	Leu	His	Gln	Leu	Glu	Gln	Met	Leu	Leu	Asn	Thr	Ser
				50					55					60
Phe	Pro	Gly	Tyr	Asn	Leu	Thr	Leu	Gln	Thr	Pro	Thr	Ile	Gln	Ser
				65					70					75
Leu	Ala	Phe	Lys	Leu	Ser	Cys	Asp	Phe	Ser	Gly	Leu	Ser	Leu	Thr
				80					85					90

Ser Trp Glu Asn Gly Thr Gly Phe Gln Asn Met Ser Ile Cys Trp
395 400 405

Val Arg Ser Pro Val Val His Ser Val Leu Val Met Gly Tyr Gly
410 415 420

Gly Leu Thr Ser Leu Phe Asn Leu Val Val Leu Ala Trp Ala Leu
425 430 435

Trp Thr Leu Arg Arg Leu Arg Glu Arg Ala Asp Ala Pro Ser Val
440 445 450

Arg Ala Cys His Asp Thr Val Thr Val Leu Gly Leu Thr Val Leu
455 460 465

Leu Gly Thr Thr Trp Ala Leu Ala Phe Phe Ser Phe Gly Val Phe
470 475 480

Leu Leu Pro Gln Leu Phe Leu Phe Thr Ile Leu Asn Ser Leu Tyr
485 490 495

Gly Phe Phe Leu Phe Leu Trp Phe Cys Ser Gln Arg Cys Arg Ser
500 505 510

Glu Ala Glu Ala Lys Ala Gln Ile Glu Ala Phe Ser Ser Ser Gln
515 520 525

Thr Thr Gln

<210> 491
<211> 1305
<212> DNA
<213> Homo Sapien

<400> 491
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gcttttgtgt gtaatatatg ggagattttc ccaagatgaa tactccctca 200
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ggcctgagaa acatcgctga ctggtgggac tggagtctga ccacacttct 300
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aggcagctaa aagtttttcc taggcattta tgcaagcctc ccaggccatt 450
ttcagcactc atcgaagact ctattcctac atgtagtccc gaagttggag 500

Pro	Gly	Ala	Leu	Gly	Gly	Lys	Cys	Tyr	Leu	Ile	Gly	Ser	Ser	Val	95	100	105
Ile	Arg	Gln	Leu	Lys	Val	Phe	Pro	Arg	His	Leu	Cys	Lys	Pro	Pro	110	115	120
Arg	Pro	Phe	Ser	Ala	Leu	Ile	Glu	Asp	Ser	Ile	Pro	Thr	Cys	Ser	125	130	135
Pro	Glu	Val	Gly	Gly	Pro	Glu	Asn	Pro	Tyr	Leu	Ile	Asp	Pro	Glu	140	145	150
Asn	Gln	Asn	Val	Thr	Leu	Asn	Gly	Pro	Gly	Gly	Cys	Gly	Thr	Arg	155	160	165
Glu	Asp	Cys	Val	Leu	Ser	Leu	Gly	Arg	Thr	Arg	Thr	Glu	Ala	His	170	175	180
Thr	Ala	Leu	Ser	Arg	Leu	Arg	Ala	Ser	Met	Trp	Ile	Asp	Arg	Ser	185	190	195
Thr	Arg	Ala	Val	Ser	Val	His	Phe	Thr	Leu	Tyr	Asn	Pro	Pro	Thr	200	205	210
Gln	Leu	Phe	Thr	Ser	Val	Ser	Leu	Arg	Val	Glu	Ile	Leu	Pro	Thr	215	220	225
Gly	Ser	Leu	Val	Pro	Ser	Ser	Leu	Val	Glu	Ser	Phe	Ser	Ile	Phe	230	235	240
Arg	Ser	Asp	Ser	Ala	Leu	Gln	Tyr	His	Leu	Met	Leu	Pro	Gln	Leu	245	250	255
Val	Phe	Leu	Ala	Leu	Ser	Leu	Ile	His	Leu	Cys	Val	Gln	Leu	Tyr	260	265	270
Arg	Met	Met	Asp	Lys	Gly	Val	Leu	Ser	Tyr	Trp	Arg	Lys	Pro	Arg	275	280	285
Asn	Trp	Leu	Glu	Val	Ala	Ser	Leu	Val	Ser	Phe	Ser	Phe	Glu	Lys	290	295	300

<210> 493
 <211> 2292
 <212> DNA
 <213> Homo Sapien

<400> 493
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 ggaaggggct agaaggaagg gagtgcccca ctgttgatgg ggtaagagga 150
 tcctgtactg agaagttgac cagagagggt ctcacatgc gcacagttcc 200
 ttctgtacct gtgtggagga aaagtactga gtgaaggcca gaaaaagaga 250

aaacagaaat gctctgccct tggagaactg ctaacctagg gctactgttg 300
 attttgacta tcttcttagt ggccgaagcg gaggggtgctg ctcaacccaaa 350
 caactcatta atgctgcaaa ctagcaagga gaatcatgct ttagcttcaa 400
 gcagtttatg tatggatgaa aaacagatta cacagaacta ctcgaaagta 450
 ctgcgagaag ttaacacttc atggcctgta aagatggcta caaatgctgt 500
 gctttgttgc cctcctatcg cattaagaaa tttgatcata ataacatggg 550
 aaataatcct gagaggccag ccttcctgca caaaagccta caggaaagaa 600
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 ctcatgacgg gtattacaga tgcataatgg taacacctga tgggaatttc 750
 catcgtggat atcacctcca agtgttagtt acacctgaac tgacctgtt 800
 tcaaaacagg aatagaactg cagtatgcaa ggcagttgca ggggaagccag 850
 ctgcgcagat ctcttgatc ccagagggcg attgtgccac taagcaagaa 900
 tactggagca atggcacagt gactgttaag agtacatgcc actgggaggt 950
 ccacaatgtg tctaccgtga cctgccacgt ctcccatttg actggcaaca 1000
 agagtctgta catagagcta cttcctgttc caggtgccaa aaaatcagca 1050
 aaattatata ttccatatat catccttact attattattt tgaccatcgt 1100
 gggattcatt tggttgttga aagtcaatgg ctgcagaaaa tataaattga 1150
 ataaaacaga atctactcca gttgttgagg aggatgaaat gcagccctat 1200
 gccagctaca cagagaagaa caatcctctc tatgatacta caaacaaggt 1250
 gaaggcatct caggcattac aaagtgaagt tgacacagac ctccatactt 1300
 tataagttgt tggactctag taccaagaaa caacaacaaa cgagatacat 1350
 tataattact gtctgatttt cttacagttc tagaatgaag acttatattg 1400
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 atattttaat gtacatatga catgtgtata tgccatgggt atatgtgtca 1700

	140		145		150
Gly Tyr Tyr Arg Cys Ile Met Val Thr	Pro Asp Gly Asn Phe His				
155	160	165			
Arg Gly Tyr His Leu Gln Val Leu Val	Thr Pro Glu Leu Thr Leu				
170	175	180			
Phe Gln Asn Arg Asn Arg Thr Ala Val	Cys Lys Ala Val Ala Gly				
185	190	195			
Lys Pro Ala Ala Gln Ile Ser Trp Ile	Pro Glu Gly Asp Cys Ala				
200	205	210			
Thr Lys Gln Glu Tyr Trp Ser Asn Gly	Thr Val Thr Val Lys Ser				
215	220	225			
Thr Cys His Trp Glu Val His Asn Val	Ser Thr Val Thr Cys His				
230	235	240			
Val Ser His Leu Thr Gly Asn Lys Ser	Leu Tyr Ile Glu Leu Leu				
245	250	255			
Pro Val Pro Gly Ala Lys Lys Ser Ala	Lys Leu Tyr Ile Pro Tyr				
260	265	270			
Ile Ile Leu Thr Ile Ile Ile Leu Thr	Ile Val Gly Phe Ile Trp				
275	280	285			
Leu Leu Lys Val Asn Gly Cys Arg Lys	Tyr Lys Leu Asn Lys Thr				
290	295	300			
Glu Ser Thr Pro Val Val Glu Glu Asp	Glu Met Gln Pro Tyr Ala				
305	310	315			
Ser Tyr Thr Glu Lys Asn Asn Pro Leu	Tyr Asp Thr Thr Asn Lys				
320	325	330			
Val Lys Ala Ser Gln Ala Leu Gln Ser	Glu Val Asp Thr Asp Leu				
335	340	345			

His Thr Leu

<210> 495
 <211> 2126
 <212> DNA
 <213> Homo Sapien

<400> 495
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 ggacacagaa gcgctctaagc acagcttcct ccttgccgct ccgggaagtg 150
 ggcagccagc ccaggaacca gtaccacctg caccatgggg ctgtcccga 200

aggagcaggt cttcttggcc ctgctggggg cctcgggggt ctcaggcctc 250
acggcactca ttctcctcct ggtggaggcc accagcgtgc tcctgccac 300
agacatcaag tttgggatcg tgtttgatgc gggctcctcc cacacgtccc 350
tcttcctgta tcagtggccg gcgaacaagg agaatggcac ggggtgtggtc 400
agccaggccc tggcctgcc a ggtggaagg cctggaatct cctcctacac 450
ttcta atgct gcacaggctg gtgagagcct gcagggctgc ttggaggagg 500
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<210> 497
 <211> 1820
 <212> DNA
 <213> Homo Sapien

<400> 497
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 tgctgctggc actgctgctg cccgtggctg gtgcctccac gccaggcacc 200
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 atgtggtagt gaacttgaga ctccagctct ctgtgtccaa ggtgaagctt 1250

Tyr Val Ala Pro Glu Ile Phe Val Tyr Glu Gly Tyr Val Val Ile
440 445 450

Ser Ser Gly Leu Phe Tyr Gln Ser
455

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<211> 899
<212> DNA
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tccattttga gtaataaatg tctgagtctg gaaaaaaaa aaaaaaaaa 899

<210> 500
<211> 125
<212> PRT
<213> Homo Sapien

<400> 500
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Val Ser Ala Asp Ile Arg Cys His Ser Cys Tyr Lys Val Pro Val

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Leu Gly Cys Val Asp Arg Gln Ser Cys Arg Leu Glu Pro Gly Gln					
	35		40		45
Gln Cys Leu Thr Thr His Ala Tyr Leu Gly Lys Met Trp Val Phe					
	50		55		60
Ser Asn Leu Arg Cys Gly Thr Pro Glu Glu Pro Cys Gln Glu Ala					
	65		70		75
Phe Asn Gln Thr Asn Arg Lys Leu Gly Leu Thr Tyr Asn Thr Thr					
	80		85		90
Cys Cys Asn Lys Asp Asn Cys Asn Ser Ala Gly Pro Arg Pro Thr					
	95		100		105
Pro Ala Leu Gly Leu Val Phe Leu Thr Ser Leu Ala Gly Leu Gly					
	110		115		120
Leu Trp Leu Leu His					
	125				

<210> 501
 <211> 845
 <212> DNA
 <213> Homo Sapien

<400> 501
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<210> 502

<211> 198

<212> PRT

<213> Homo Sapien

<400> 502

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Gly	Ser	Gln	Arg	Arg	Leu	Trp	Arg	Trp	Cys	Gly	Ser	Glu	Glu	Val
				20					25					30

Val	Ala	Val	Leu	Gln	Glu	Ser	Ile	Ser	Leu	Pro	Leu	Glu	Ile	Pro
				35					40					45

Pro	Asp	Glu	Glu	Val	Glu	Asn	Ile	Ile	Trp	Ser	Ser	His	Lys	Ser
				50					55					60

Leu	Ala	Thr	Val	Val	Pro	Gly	Lys	Glu	Gly	His	Pro	Ala	Thr	Ile
				65					70					75

Met	Val	Thr	Asn	Pro	His	Tyr	Gln	Gly	Gln	Val	Ser	Phe	Leu	Asp
				80					85					90

Pro	Ser	Tyr	Ser	Leu	His	Ile	Ser	Asn	Leu	Ser	Trp	Glu	Asp	Ser
				95					100					105

Gly	Leu	Tyr	Gln	Ala	Gln	Val	Asn	Leu	Arg	Thr	Ser	Gln	Ile	Ser
				110					115					120

Thr	Met	Gln	Gln	Tyr	Asn	Leu	Cys	Val	Tyr	His	Pro	Asn	Tyr	Ala
				125					130					135

Ser	Glu	Lys	Pro	Ser	Thr	Ala	Phe	Cys	Leu	Leu	Ala	Lys	Gly	Leu
				140					145					150

Leu	Ile	Phe	Leu	Leu	Leu	Val	Ile	Leu	Ala	Met	Gly	Leu	Trp	Val
				155					160					165

Ile	Arg	Val	Gln	Lys	Arg	His	Lys	Met	Pro	Arg	Met	Lys	Lys	Leu
				170					175					180

Met	Arg	Asn	Arg	Met	Lys	Leu	Arg	Lys	Glu	Ala	Lys	Pro	Gly	Ser
				185					190					195

Ser Pro Ala

<210> 503

<211> 1977

<212> DNA

<213> Homo Sapien

<400> 503

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gcgggatgta	aaagctctta	ccctccacta	tgaccgctat	accacctccc	350
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aatttgga	aactgtggtg	agctgtgaag	gctatgagtc	ctctgaagac	550
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gtatgtcagt	gtaacatgca	gatgtatatt	gcagtttttg	aaagtgatca	1450

Lys Gln His Gly Phe Ala Ser Phe Ser Asp Tyr Tyr Tyr Lys Trp
155 160 165

Ser Ser Ala Asp Ser Cys Asn Met Ser Gly Leu Ile Thr Ile Val
170 175 180

Val Leu Leu Gly Ile Ala Phe Val Val Tyr Lys Leu Phe Leu Ser
185 190 195

Asp Gly Gln Tyr Ser Pro Pro Pro Tyr Ser Glu Tyr Pro Pro Phe
200 205 210

Ser His Arg Tyr Gln Arg Phe Thr Asn Ser Ala Gly Pro Pro Pro
215 220 225

Pro Gly Phe Lys Ser Glu Phe Thr Gly Pro Gln Asn Thr Gly His
230 235 240

Gly Ala Thr Ser Gly Phe Gly Ser Ala Phe Thr Gly Gln Gln Gly
245 250 255

Tyr Glu Asn Ser Gly Pro Gly Phe Trp Thr Gly Leu Gly Thr Gly
260 265 270

Gly Ile Leu Gly Tyr Leu Phe Gly Ser Asn Arg Ala Ala Thr Pro
275 280 285

Phe Ser Asp Ser Trp Tyr Tyr Pro Ser Tyr Pro Pro Ser Tyr Pro
290 295 300

Gly Thr Trp Asn Arg Ala Tyr Ser Pro Leu His Gly Gly Ser Gly
305 310 315

Ser Tyr Ser Val Cys Ser Asn Ser Asp Thr Lys Thr Arg Thr Ala
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Ser Gly Tyr Gly Gly Thr Arg Arg Arg
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<210> 505

<211> 1671

<212> DNA

<213> Homo Sapien

<400> 505

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<210> 508

<211> 362

<212> PRT

<213> Homo Sapien

<400> 508

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Leu	Leu	Val	Phe	Gly	Val	Trp	Ile	Leu	Tyr	Ile	Leu	Lys	Leu	Asn
				20					25					30
Tyr	Thr	Thr	Glu	Glu	Cys	Asp	Met	Lys	Lys	Met	His	Tyr	Val	Asp
			35						40					45
Pro	Asp	His	Val	Lys	Arg	Ala	Gln	Lys	Tyr	Ala	Gln	Gln	Val	Leu
				50					55					60
Gln	Lys	Glu	Cys	Arg	Pro	Lys	Phe	Ala	Lys	Thr	Ser	Met	Ala	Leu
				65					70					75
Leu	Phe	Glu	His	Arg	Tyr	Ser	Val	Asp	Leu	Leu	Pro	Phe	Val	Gln
				80					85					90
Lys	Ala	Pro	Lys	Asp	Ser	Glu	Ala	Glu	Ser	Lys	Tyr	Asp	Pro	Pro
				95					100					105
Phe	Gly	Phe	Arg	Lys	Phe	Ser	Ser	Lys	Val	Gln	Thr	Leu	Leu	Glu
				110					115					120
Leu	Leu	Pro	Glu	His	Asp	Leu	Pro	Glu	His	Leu	Lys	Ala	Lys	Thr
				125					130					135
Cys	Arg	Arg	Cys	Val	Val	Ile	Gly	Ser	Gly	Gly	Ile	Leu	His	Gly
				140					145					150
Leu	Glu	Leu	Gly	His	Thr	Leu	Asn	Gln	Phe	Asp	Val	Val	Ile	Arg
				155					160					165
Leu	Asn	Ser	Ala	Pro	Val	Glu	Gly	Tyr	Ser	Glu	His	Val	Gly	Asn
				170					175					180
Lys	Thr	Thr	Ile	Arg	Met	Thr	Tyr	Pro	Glu	Gly	Ala	Pro	Leu	Ser
				185					190					195
Asp	Leu	Glu	Tyr	Tyr	Ser	Asn	Asp	Leu	Phe	Val	Ala	Val	Leu	Phe

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Lys Ser Val Asp	Phe Asn Trp Leu Gln	Ala Met Val Lys Lys	Glu		
	215		220		225
Thr Leu Pro Phe	Trp Val Arg Leu Phe	Phe Trp Lys Gln Val	Ala		
	230		235		240
Glu Lys Ile Pro	Leu Gln Pro Lys His	Phe Arg Ile Leu Asn	Pro		
	245		250		255
Val Ile Ile Lys	Glu Thr Ala Phe Asp	Ile Leu Gln Tyr Ser	Glu		
	260		265		270
Pro Gln Ser Arg	Phe Trp Gly Arg Asp	Lys Asn Val Pro Thr	Ile		
	275		280		285
Gly Val Ile Ala	Val Val Leu Ala Thr	His Leu Cys Asp	Glu Val		
	290		295		300
Ser Leu Ala Gly	Phe Gly Tyr Asp Leu	Asn Gln Pro Arg Thr	Pro		
	305		310		315
Leu His Tyr Phe	Asp Ser Gln Cys Met	Ala Ala Met Asn Phe	Gln		
	320		325		330
Thr Met His Asn	Val Thr Thr Glu Thr	Lys Phe Leu Leu Lys	Leu		
	335		340		345
Val Lys Glu Gly	Val Val Lys Asp Leu	Ser Gly Gly Ile Asp	Arg		
	350		355		360
Glu Phe					

<210> 509
 <211> 1233
 <212> DNA
 <213> Homo Sapien

<400> 509
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 actaaacccc caataaaatt gccatcacct cag 1233

<210> 510
 <211> 143
 <212> PRT
 <213> Homo Sapien

<400> 510
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 Cys Arg Arg Val Leu Ser Trp Val Pro Val Leu Val Ile Val Leu
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 Val Val Leu Trp Ser Tyr Tyr Ala Tyr Val Phe Glu Leu Cys Leu
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 Val Ile Tyr Leu Ile Leu Tyr His Ala Ile Phe Val Phe Phe Thr
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 Trp Thr Tyr Trp Lys Ser Ile Phe Thr Leu Pro Gln Gln Pro Asn
 65 70 75
 Gln Lys Phe His Leu Ser Tyr Thr Asp Lys Glu Arg Tyr Glu Asn
 80 85 90
 Glu Glu Arg Pro Glu Val Gln Lys Gln Met Leu Val Asp Met Ala
 95 100 105

Lys Lys Leu Pro Val Tyr Thr Arg Thr Gly Ser Gly Gly Gln Phe
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Ile Gln Arg Gln Leu Glu Arg Gln Leu Ser Lys Tyr Leu Arg Lys
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<210> 511
<211> 2176
<212> DNA
<213> Homo Sapien

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<210> 512

<211> 178

<212> PRT

<213> Homo Sapien

<400> 512

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				20					25					30
Leu	Ser	Leu	Leu	Gln	Arg	Val	Ala	Ser	Tyr	Ala	Arg	Lys	Trp	Gln
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Gln Met Arg Pro Ile Pro Thr Val Ala Arg Ala Tyr Pro Leu Val
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Gly His Ala Leu Leu Met Lys Pro Asp Gly Arg Gly Lys Gly Arg
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Arg Ser Ser Trp Ser Ala Thr Gly Ser Ala Ala Pro Phe Pro Pro
80 85 90

Ser Asp Gln Pro Gly Thr Arg Cys Leu Trp Arg Trp Pro Gln Glu
95 100 105

Arg Gly Ala Cys His Pro Val Glu Asn Ala Leu Pro Val Leu Val
110 115 120

Val Ala Pro Trp His Pro Pro Thr Leu Leu Val Pro His Pro Lys
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Val Ser Ile Phe Phe Val Cys Ser Thr Gly Cys Gly Ile Ser Lys
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Pro Leu Pro Ser Val Phe Ser His Leu Thr Ala Ala Gln Leu Ser
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Lys Pro Cys Arg Phe Leu Leu Pro Trp Leu Gly Lys Pro
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<210> 513
<211> 2403
<212> DNA
<213> Homo Sapien

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<210> 514
 <211> 428
 <212> PRT
 <213> Homo Sapien

<400> 514
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 35 40 45
 Asp Lys Asp Pro Arg Val Gln Glu Asn Pro Gly Asp Gln Arg Arg
 50 55 60
 Val Pro Glu Val Thr Gly Asp Ala Arg Ser Ala Phe Arg Pro Leu
 65 70 75
 Arg Asp Asn Gly Gly Leu Ser Pro Phe Val Pro Gly Pro Gly Pro
 80 85 90
 Leu Gln Thr Asp Leu His Ala Gln Arg Ser Glu Ile Arg Tyr Asn
 95 100 105
 Gln Thr Ser Gln Thr Ser Trp Thr Ser Ser Cys Thr Asn Arg Asn
 110 115 120
 Ala Ile Ser Ser Ser Tyr Ser Ser Thr Gly Gly Leu Leu Gly Leu
 125 130 135
 Lys Arg Arg Arg Gly Pro Ala Ser Ser His Cys Gln Leu Thr Leu
 140 145 150
 Ser Ser Ser Lys Thr Val Ser Glu Asp Arg Pro Gln Ala Val Ser
 155 160 165
 Ser Gly His Thr Gln Cys Glu Lys Ala Ala Asp Ile Ala Pro Gly
 170 175 180
 Gln Thr Leu Thr Leu Arg Asn Asp Ser Ser Thr Ser Glu Ala Ser
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Glu	Pro	Leu	Met	Leu	Pro	Pro	Pro	Leu	Glu	Leu	Gly	Tyr	Arg	Val
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Thr	Val	Glu	Asp	Leu	Asp	Arg	Glu	Lys	Glu	Ala	Ala	Phe	Gln	Arg
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Ile	Asn	Ser	Ala	Leu	Gln	Val	Glu	Asp	Lys	Ala	Ile	Ser	Asp	Cys
				245					250					255
Arg	Pro	Ser	Arg	Pro	Ser	His	Thr	Leu	Ser	Ser	Leu	Ala	Thr	Gly
				260					265					270
Ala	Ser	Gly	Leu	Pro	Ala	Val	Ser	Lys	Ala	Pro	Ser	Met	Asp	Ala
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Gln	Gln	Glu	Thr	His	Lys	Ser	Gln	Asp	Cys	Leu	Gly	Leu	Leu	Asp
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Pro	Leu	Ala	Ser	Ala	Ala	Gly	Val	Pro	Ser	Thr	Ala	Pro	Met	Ser
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Gly	Lys	Lys	His	Arg	Pro	Pro	Gly	Pro	Leu	Phe	Ser	Ser	Ser	Asp
				320					325					330
Pro	Leu	Pro	Ala	Thr	Ser	Ser	Asp	Ser	Gln	Asp	Ser	Ala	Gln	Val
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Thr	Ser	Leu	Ile	Pro	Ala	Pro	Phe	Pro	Ala	Ala	Ser	Met	Asp	Ala
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Gly	Met	Arg	Arg	Thr	Arg	His	Gly	Thr	Ser	Ala	Pro	Ala	Ala	Ala
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Ala	Ala	Ala	Pro	Pro	Arg	Ser	Thr	Leu	Asn	Pro	Thr	Leu	Gly	Ser
				380					385					390
Leu	Leu	Glu	Trp	Met	Glu	Ala	Leu	His	Ile	Ser	Gly	Pro	Gln	Pro
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Gln	Leu	Gln	Gln	Val	Pro	Arg	Gly	Gln	Asn	Gln	Arg	Ser	Gln	Thr
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<210> 515

<211> 2171

<212> DNA

<213> Homo Sapien

<400> 515

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<211> 443

<212> PRT

<213> Homo Sapien

<400> 516

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			20						25					30
Leu	Gln	Val	Trp	Ile	Glu	Glu	Gln	His	Thr	Gly	Arg	Val	Glu	Lys
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Arg	Arg	Glu	Gln	Lys	Val	Thr	Ser	Gly	Trp	Gly	Pro	Val	Lys	Tyr
			50						55					60
Leu	Arg	Pro	Val	Pro	Arg	Ile	Met	Ser	Thr	Glu	Lys	Ile	Gln	Glu
			65						70					75
His	Ile	Thr	Asn	Gln	Asn	Pro	Lys	Phe	His	Met	Pro	Glu	Asp	Val
			80						85					90
Arg	Glu	Lys	Lys	Glu	Asn	Leu	Leu	Leu	Asn	Ser	Glu	Arg	Ser	Thr
			95						100					105
Arg	Leu	Leu	Thr	Lys	Thr	Ser	His	Ser	Gln	Gly	Gly	Asp	Gln	Ala
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Leu	Ser	Lys	Ser	Thr	Gly	Ser	Pro	Thr	Glu	Lys	Leu	Ile	Glu	Lys
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<211> 3690

<212> DNA

<213> Homo Sapien

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<210> 518

<211> 1137

<212> PRT

<213> Homo Sapien

<400> 518

Met	Pro	Leu	Ser	Ser	His	Leu	Leu	Pro	Ala	Leu	Val	Leu	Phe	Leu
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Ala	Gly	Ser	Ser	Gly	Trp	Ala	Trp	Val	Pro	Asn	His	Cys	Arg	Ser
				20				25					30	
Pro	Gly	Gln	Ala	Val	Cys	Asn	Phe	Val	Cys	Asp	Cys	Arg	Asp	Cys
				35				40					45	
Ser	Asp	Glu	Ala	Gln	Cys	Gly	Tyr	His	Gly	Ala	Ser	Pro	Thr	Leu

				50					55					60				
Gly	Ala	Pro	Phe	Ala 65	Cys	Asp	Phe	Glu	Gln 70	Asp	Pro	Cys	Gly	Trp 75				
Arg	Asp	Ile	Ser	Thr 80	Ser	Gly	Tyr	Ser	Trp 85	Leu	Arg	Asp	Arg	Ala 90				
Gly	Ala	Ala	Leu	Glu 95	Gly	Pro	Gly	Pro	His 100	Ser	Asp	His	Thr	Leu 105				
Gly	Thr	Asp	Leu	Gly 110	Trp	Tyr	Met	Ala	Val 115	Gly	Thr	His	Arg	Gly 120				
Lys	Glu	Ala	Ser	Thr 125	Ala	Ala	Leu	Arg	Ser 130	Pro	Thr	Leu	Arg	Glu 135				
Ala	Ala	Ser	Ser	Cys 140	Lys	Leu	Arg	Leu	Trp 145	Tyr	His	Ala	Ala	Ser 150				
Gly	Asp	Val	Ala	Glu 155	Leu	Arg	Val	Glu	Leu 160	Thr	His	Gly	Ala	Glu 165				
Thr	Leu	Thr	Leu	Trp 170	Gln	Ser	Thr	Gly	Pro 175	Trp	Gly	Pro	Gly	Trp 180				
Gln	Glu	Leu	Ala	Val 185	Thr	Thr	Gly	Arg	Ile 190	Arg	Gly	Asp	Phe	Arg 195				
Val	Thr	Phe	Ser	Ala 200	Thr	Arg	Asn	Ala	Thr 205	His	Arg	Gly	Ala	Val 210				
Ala	Leu	Asp	Asp	Leu 215	Glu	Phe	Trp	Asp	Cys 220	Gly	Leu	Pro	Thr	Pro 225				
Gln	Ala	Asn	Cys	Pro 230	Pro	Gly	His	His	His 235	Cys	Gln	Asn	Lys	Val 240				
Cys	Val	Glu	Pro	Gln 245	Gln	Leu	Cys	Asp	Gly 250	Glu	Asp	Asn	Cys	Gly 255				
Asp	Leu	Ser	Asp	Glu 260	Asn	Pro	Leu	Thr	Cys 265	Gly	Arg	His	Ile	Ala 270				
Thr	Asp	Phe	Glu	Thr 275	Gly	Leu	Gly	Pro	Trp 280	Asn	Arg	Ser	Glu	Gly 285				
Trp	Ser	Arg	Asn	His 290	Arg	Ala	Gly	Gly	Pro 295	Glu	Arg	Pro	Ser	Trp 300				
Pro	Arg	Arg	Asp	His 305	Ser	Arg	Asn	Ser	Ala 310	Gln	Gly	Ser	Phe	Leu 315				
Val	Ser	Val	Ala	Glu 320	Pro	Gly	Thr	Pro	Ala 325	Ile	Leu	Ser	Ser	Pro 330				
Glu	Phe	Gln	Ala	Ser 335	Gly	Thr	Ser	Asn	Cys 340	Ser	Leu	Val	Phe	Tyr 345				

Gln Tyr Leu Ser	Gly 350	Ser Glu Ala Gly	Cys 355	Leu Gln Leu Phe	Leu 360
Gln Thr Leu Gly	Pro 365	Gly Ala Pro Arg	Ala 370	Pro Val Leu Leu	Arg 375
Arg Arg Arg Gly	Glu 380	Leu Gly Thr Ala	Trp 385	Val Arg Asp Arg	Val 390
Asp Ile Gln Ser	Ala 395	Tyr Pro Phe Gln	Ile 400	Leu Leu Ala Gly	Gln 405
Thr Gly Pro Gly	Gly 410	Val Val Gly Leu	Asp 415	Asp Leu Ile Leu	Ser 420
Asp His Cys Arg	Pro 425	Val Ser Glu Val	Ser 430	Thr Leu Gln Pro	Leu 435
Pro Pro Gly Pro	Arg 440	Ala Pro Ala Pro	Gln 445	Pro Leu Pro Pro	Ser 450
Ser Arg Leu Gln	Asp 455	Ser Cys Lys Gln	Gly 460	His Leu Ala Cys	Gly 465
Asp Leu Cys Val	Pro 470	Pro Glu Gln Leu	Cys 475	Asp Phe Glu Glu	Gln 480
Cys Ala Gly Gly	Glu 485	Asp Glu Gln Ala	Cys 490	Gly Thr Thr Asp	Phe 495
Glu Ser Pro Glu	Ala 500	Gly Gly Trp Glu	Asp 505	Ala Ser Val Gly	Arg 510
Leu Gln Trp Arg	Arg 515	Val Ser Ala Gln	Glu 520	Ser Gln Gly Ser	Ser 525
Ala Ala Ala Ala	Gly 530	His Phe Leu Ser	Leu 535	Gln Arg Ala Trp	Gly 540
Gln Leu Gly Ala	Glu 545	Ala Arg Val Leu	Thr 550	Pro Leu Leu Gly	Pro 555
Ser Gly Pro Ser	Cys 560	Glu Leu His Leu	Ala 565	Tyr Tyr Leu Gln	Ser 570
Gln Pro Arg Glu	Val 575	Ser Cys Asn Phe	Glu 580	Arg Asp Thr Cys	Ser 585
Trp Tyr Pro Gly	His 590	Leu Ser Asp Thr	His 595	Trp Arg Trp Val	Glu 600
Ser Arg Gly Pro	Asp 605	His Asp His Thr	Thr 610	Gly Gln Gly His	Phe 615
Val Leu Leu Asp	Pro 620	Thr Asp Pro Leu	Ala 625	Trp Gly His Ser	Ala 630
His Leu Leu Ser	Arg	Pro Gln Val Pro	Ala	Ala Pro Thr Glu	Cys

80										85					90				
Trp	Thr	Leu	Val	Ala	Ser	Val	His	Glu	Asn	Asp	Met	Arg	Gly	Lys					
				95					100					105					
Cys	Thr	Val	Gly	Asp	Arg	Trp	Ser	Ser	Gln	Gln	Gly	Asn	Lys	Ala					
				110					115					120					
Asp	Tyr	Pro	Glu	Gly	Asp	Gly	Asn	Trp	Ala	Asn	Tyr	Asn	Thr	Phe					
				125					130					135					
Gly	Ser	Ala	Glu	Ala	Ala	Thr	Ser	Asp	Asp	Tyr	Lys	Asn	Pro	Gly					
				140					145					150					
Tyr	Tyr	Asp	Ile	Gln	Ala	Lys	Asp	Leu	Gly	Ile	Trp	His	Val	Pro					
				155					160					165					
Asn	Lys	Ser	Pro	Met	Gln	His	Trp	Arg	Asn	Ser	Ala	Leu	Leu	Arg					
				170					175					180					
Tyr	Arg	Thr	Asn	Thr	Gly	Phe	Leu	Gln	Arg	Leu	Gly	His	Asn	Leu					
				185					190					195					
Phe	Gly	Ile	Tyr	Gln	Lys	Tyr	Pro	Val	Lys	Tyr	Arg	Ser	Gly	Lys					
				200					205					210					
Cys	Trp	Asn	Asp	Asn	Gly	Pro	Ala	Ile	Pro	Val	Val	Tyr	Asp	Phe					
				215					220					225					
Gly	Asp	Ala	Lys	Lys	Thr	Ala	Ser	Tyr	Tyr	Ser	Pro	Tyr	Gly	Gln					
				230					235					240					
Arg	Glu	Phe	Val	Ala	Gly	Phe	Val	Gln	Phe	Arg	Val	Phe	Asn	Asn					
				245					250					255					
Glu	Arg	Ala	Ala	Asn	Ala	Leu	Cys	Ala	Gly	Ile	Lys	Val	Thr	Gly					
				260					265					270					
Cys	Asn	Thr	Glu	His	His	Cys	Ile	Gly	Gly	Gly	Gly	Phe	Phe	Pro					
				275					280					285					
Gln	Gly	Lys	Pro	Arg	Gln	Cys	Gly	Asp	Phe	Ser	Ala	Phe	Asp	Trp					
				290					295					300					
Asp	Gly	Tyr	Gly	Thr	His	Val	Lys	Ser	Ser	Cys	Ser	Arg	Glu	Ile					
				305					310					315					
Thr	Glu	Ala	Ala	Val	Leu	Leu	Phe	Tyr	Arg										
				320					325										

<210> 521

<211> 2974

<212> DNA

<213> Homo Sapien

<400> 521

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 agtcctggtg tggccctgtg acatgagcca ttggcttaat gtcaagggtca 150
 ttctagaaga gctcatagt agaggccatg aggtaacagt attgactcac 200
 tcaaagcctt cgttaattga ctacaggaag cttctgcat tgaaatttga 250
 ggtgggtccat atgccacagg acagaacaga agaaaatgaa atatttgttg 300
 acctagctct gaatgtcttg ccaggcttat caacctggca atcagttata 350
 aaattaaatg atttttttgt tgaaataaga ggaactttaa aaatgatgtg 400
 tgagagcttt atctacaatc agacgcttat gaagaagcta caggaaacca 450
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 catccacatt aggagccaat actcggtgtg atgattggat accccagaat 1100
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gttttgaaag tttcttaagt ttta 2974

<210> 522

<211> 527

<212> PRT

<213> Homo Sapien

<400> 522

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Phe	Cys	Val	Gly	Cys	Gly	Phe	Cys	Gly	Lys	Val	Leu	Val	Trp	Pro
			20						25					30

Cys	Asp	Met	Ser	His	Trp	Leu	Asn	Val	Lys	Val	Ile	Leu	Glu	Glu
				35					40					45

Leu	Ile	Val	Arg	Gly	His	Glu	Val	Thr	Val	Leu	Thr	His	Ser	Lys
				50					55					60

Pro	Ser	Leu	Ile	Asp	Tyr	Arg	Lys	Pro	Ser	Ala	Leu	Lys	Phe	Glu
				65					70					75

Val	Val	His	Met	Pro	Gln	Asp	Arg	Thr	Glu	Glu	Asn	Glu	Ile	Phe
				80					85					90

Val	Asp	Leu	Ala	Leu	Asn	Val	Leu	Pro	Gly	Leu	Ser	Thr	Trp	Gln
				95					100					105

Ser	Val	Ile	Lys	Leu	Asn	Asp	Phe	Phe	Val	Glu	Ile	Arg	Gly	Thr
				110					115					120

Leu	Lys	Met	Met	Cys	Glu	Ser	Phe	Ile	Tyr	Asn	Gln	Thr	Leu	Met
				125					130					135

Lys	Lys	Leu	Gln	Glu	Thr	Asn	Tyr	Asp	Val	Met	Leu	Ile	Asp	Pro
				140					145					150

Val	Ile	Pro	Cys	Gly	Asp	Leu	Met	Ala	Glu	Leu	Leu	Ala	Val	Pro
				155					160					165

Phe	Val	Leu	Thr	Leu	Arg	Ile	Ser	Val	Gly	Gly	Asn	Met	Glu	Arg
				170					175					180

Ser	Cys	Gly	Lys	Leu	Pro	Ala	Pro	Leu	Ser	Tyr	Val	Pro	Val	Pro
				185					190					195

Met	Thr	Gly	Leu	Thr	Asp	Arg	Met	Thr	Phe	Leu	Glu	Arg	Val	Lys
				200					205					210

Asn	Ser	Met	Leu	Ser	Val	Leu	Phe	His	Phe	Trp	Ile	Gln	Asp	Tyr
				215					220					225

Asp	Tyr	His	Phe	Trp	Glu	Glu	Phe	Tyr	Ser	Lys	Ala	Leu	Gly	Arg
				230					235					240

Pro	Thr	Thr	Leu	Cys	Glu	Thr	Val	Gly	Lys	Ala	Glu	Ile	Trp	Leu
				245					250					255

Ile	Arg	Thr	Tyr	Trp	Asp	Phe	Glu	Phe	Pro	Gln	Pro	Tyr	Gln	Pro
				260					265					270
Asn	Phe	Glu	Phe	Val	Gly	Gly	Leu	His	Cys	Lys	Pro	Ala	Lys	Ala
				275					280					285
Leu	Pro	Lys	Glu	Met	Glu	Asn	Phe	Val	Gln	Ser	Ser	Gly	Glu	Asp
				290					295					300
Gly	Ile	Val	Val	Phe	Ser	Leu	Gly	Ser	Leu	Phe	Gln	Asn	Val	Thr
				305					310					315
Glu	Glu	Lys	Ala	Asn	Ile	Ile	Ala	Ser	Ala	Leu	Ala	Gln	Ile	Pro
				320					325					330
Gln	Lys	Val	Leu	Trp	Arg	Tyr	Lys	Gly	Lys	Lys	Pro	Ser	Thr	Leu
				335					340					345
Gly	Ala	Asn	Thr	Arg	Leu	Tyr	Asp	Trp	Ile	Pro	Gln	Asn	Asp	Leu
				350					355					360
Leu	Gly	His	Pro	Lys	Thr	Lys	Ala	Phe	Ile	Thr	His	Gly	Gly	Met
				365					370					375
Asn	Gly	Ile	Tyr	Glu	Ala	Ile	Tyr	His	Gly	Val	Pro	Met	Val	Gly
				380					385					390
Val	Pro	Ile	Phe	Gly	Asp	Gln	Leu	Asp	Asn	Ile	Ala	His	Met	Lys
				395					400					405
Ala	Lys	Gly	Ala	Ala	Val	Glu	Ile	Asn	Phe	Lys	Thr	Met	Thr	Ser
				410					415					420
Glu	Asp	Leu	Leu	Arg	Ala	Leu	Arg	Thr	Val	Ile	Thr	Asp	Ser	Ser
				425					430					435
Tyr	Lys	Glu	Asn	Ala	Met	Arg	Leu	Ser	Arg	Ile	His	His	Asp	Gln
				440					445					450
Pro	Val	Lys	Pro	Leu	Asp	Arg	Ala	Val	Phe	Trp	Ile	Glu	Phe	Val
				455					460					465
Met	Arg	His	Lys	Gly	Ala	Lys	His	Leu	Arg	Ser	Ala	Ala	His	Asp
				470					475					480
Leu	Thr	Trp	Phe	Gln	His	Tyr	Ser	Ile	Asp	Val	Ile	Gly	Phe	Leu
				485					490					495
Leu	Thr	Cys	Val	Ala	Thr	Ala	Ile	Phe	Leu	Phe	Thr	Lys	Cys	Phe
				500					505					510
Leu	Phe	Ser	Cys	Gln	Lys	Phe	Asn	Lys	Thr	Arg	Lys	Ile	Glu	Lys
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Arg	Glu													

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<211> 2615
<212> DNA
<213> Homo Sapien

<400> 523
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cctgcccggg ttcttggtec aggcctgag ctacctgtgg ttccgagcag 200
acgggcatcc agggcattgc tccttgggtga tgctgcacct cctacagctt 250
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 aaagtgcaaa tgtca 2615

<210> 524
 <211> 686
 <212> PRT
 <213> Homo Sapien
 <400> 524

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Ser Leu Leu His	Pro Lys Ser Thr Asp	Ile Trp Gln Gly Cys Leu			
	320		325		330
Arg Lys Ser Cys	Gly Ile Ala Gly Gly	Asp Lys Thr Glu Arg Arg			
	335		340		345
Asp Ser Pro Arg	Ala Thr Asp Leu Ala	Gly Lys Arg Thr Glu Ser			
	350		355		360
Ser Gly Ser Cys	Gln Gly Ala Ser Tyr	Glu Pro Thr Ile Leu Gly			
	365		370		375
Lys Pro Pro Thr	Pro Glu Gln Val Pro	Pro Glu Ala Gly Leu Gly			
	380		385		390
Thr Gln Val Ala	Val Glu Asp Ser Phe	Leu Ser His His His Trp			
	395		400		405
Leu Trp Val Lys	Leu Ala Leu Lys Thr	Gly Asn Val Ser Lys Ile			
	410		415		420
Asn Ala Ala Phe	Gly Asp Asn Ser Pro	Ala Tyr Cys Pro Pro Ala			
	425		430		435
Trp Gly Leu Ser	Gln Gln Asp Tyr Leu	Gln Arg Lys Ala Leu Ser			
	440		445		450
Ala Gln Gln Glu	Leu Pro Ser Ser Ser	Arg Asp Pro Ser Thr Leu			
	455		460		465
Glu Asn Ser Ser	Ala Phe Glu Gly Val	Pro Lys Ala Glu Ala Asp			
	470		475		480
Pro Leu Glu Thr	Ser Ser Tyr Val Ser	Phe Ala Ser Asp Gln Gln			
	485		490		495
Asp Glu Ala Pro	Thr Gln Asn Pro Ala	Ala Thr Gln Gly Glu Gly			
	500		505		510
Thr Pro Lys Glu	Gly Ala Asp Ala Val	Ser Gly Thr Gln Gly Lys			
	515		520		525
Gly Thr Gly Gly	Gln Gln Arg Gly Gly	Glu Gly Gln Gln Ser Ser			
	530		535		540
Thr Leu Tyr Phe	Ser Ala Thr Ala Glu	Val Ala Thr Ser Ser Gln			
	545		550		555
Gln Glu Gly Ser	Pro Ala Thr Leu Gln	Thr Ala His Ser Gly Arg			
	560		565		570
Arg Leu Gly Lys	Ser Ser Pro Ala Gln	Pro Ala Ser Pro His Pro			
	575		580		585

				155					160					165
Thr	Gly	Thr	Ala	Thr 170	Gly	Cys	Ala	Thr	Gly 175	Cys	Ala	Thr	Gly	Thr 180
Gly	Thr	Gly	Thr	Gly 185	Cys	Gly	Thr	Gly	Cys 190	Ala	Cys	Ala	Cys	Gly 195
Thr	Gly	Thr	Gly	Thr 200	Gly	Thr	Thr	Thr	Gly 205	Cys	Gly	Thr	Gly	Thr 210
Ala	Cys	Ala	Thr	Gly 215	Thr	Gly	Cys	Ala	Thr 220	Gly	Thr	Gly	Thr	Gly 225
Thr	Gly	Thr	Thr	Gly 230	Thr	Gly	Thr	Gly	Cys 235	Cys	Thr	Gly	Thr	Gly 240
Thr	Gly	Thr	Gly	Cys 245	Ala	Cys	Ala	Thr	Gly 250	Thr	Ala	Gly	Ala	Ala 255
Ala	Gly	Ala	Ala	Ala 260	Gly	Thr	Gly	Ala	Thr 265	Gly	Thr	Gly	Thr	Gly 270
Gly	Gly	Ala	Ala	Thr 275	Gly	Gly	Ala	Gly	Ala 280	Ala	Thr	Thr	Cys	Cys 285
Ala	Ala	Cys	Cys	Cys 290	Ala	Gly	Gly	Ala	Gly 295	Gly	Ala	Gly	Ala	Cys 300
Thr	Gly	Thr	Gly	Cys 305	Cys	Thr	Gly	Gly	Gly 310	Gly	Cys	Thr	Gly	Cys 315
Cys	Ala	Cys	Gly	Ala 320	Gly	Ala	Ala	Gly	Thr 325	Gly	Gly	Thr	Gly	Ala 330
Cys	Ala	Cys	Thr	Thr 335	Cys	Gly	Ala	Gly	Ala 340	Ala	Ala	Cys	Gly	Gly 345
Gly	Thr	Thr	Cys	Cys 350	Ala	Ala	Ala	Thr	Gly 355	Cys	Ala	Cys	Gly	Thr 360
Thr	Gly	Cys	Cys	Thr 365	Thr	Cys	Cys	Ala	Gly 370	Thr	Thr	Cys	Thr	Cys 375
Thr	Gly	Thr	Gly	Thr 380	Gly	Ala	Cys	Cys	Thr 385	Thr	Gly	Gly	Gly	Cys 390
Ala	Ala	Gly	Thr	Cys 395	Ala	Cys	Thr	Thr	Cys 400	Ala	Gly	Cys	Thr	Cys 405
Cys	Cys	Thr	Gly	Ala 410	Gly	Cys	Thr	Thr	Thr 415	Gly	Thr	Thr	Thr	Thr 420
Thr	Ala	Ala	Ala	Ala 425	Ala	Thr	Ala	Thr	Thr 430	Thr	Thr	Thr	Thr	Ala 435
Ala	Ala	Thr	Gly	Thr 440	Ala	Thr	Ala	Ala	Ala 445	Ala	Cys	Cys	Ala	Thr 450

Gly Gly Ala Cys	Cys Ala Thr Thr Ala	Cys Ala Thr Ala Thr	Gly
455		460	465
Ala Ala Gly Ala	Gly Ala Ala Ala Thr	Gly Thr Gly Thr Gly	Thr
470		475	480
Gly Cys Ala Ala	Ala Cys Ala Thr Thr	Cys Ala Gly Thr Thr	Ala
485		490	495
Ala Thr Ala Ala	Thr Cys Ala Cys Ala	Ala Gly Gly Thr Gly	Gly
500		505	510
Ala Gly Gly Ala	Gly Thr Gly Cys Cys	Thr Gly Cys Thr Cys	Ala
515		520	525
Gly Ala Cys Cys	Cys Ala Gly Ala Gly	Cys Thr Gly Ala Cys	Ala
530		535	540
Cys Ala Gly Gly	Gly Ala Ala Cys Thr	Cys Thr Cys Cys Cys	Ala
545		550	555
Gly Ala Ala Gly	Gly Cys Thr Gly Cys	Ala Gly Gly Gly Cys	Thr
560		565	570
Thr Cys Cys Cys	Thr Cys Cys Cys Ala	Ala Cys Cys Cys Thr	Cys
575		580	585
Cys Ala Ala Cys	Gly Gly Cys Cys Cys	Ala Cys Thr Thr Gly	Cys
590		595	600
Thr Gly Ala Gly	Cys Cys Cys Gly Thr	Gly Cys Thr Thr Ala	Thr
605		610	615
Cys Thr Gly Thr	Thr Cys Ala Gly Thr	Gly Gly Ala Ala Ala	Thr
620		625	630
Gly Cys Cys Ala	Thr Gly Thr Gly Cys	Cys Ala Cys Gly Thr	Thr
635		640	645
Cys Cys Thr Cys	Ala Gly Ala Ala Gly	Thr Ala Ala Ala Gly	Cys
650		655	660
Cys Ala Cys Thr	Ala Gly Gly Thr Ala	Ala Gly Thr Gly Thr	Gly
665		670	675
Ala Cys Ala Cys	Thr Cys Thr Gly Thr	Gly Cys Cys Cys Ala	Gly
680		685	690
Cys Thr Thr Gly	Gly Thr Gly Cys Ala	Ala Ala Gly Cys Cys	Cys
695		700	705
Cys Thr Thr Gly	Thr Gly Thr Gly Thr	Gly Cys Thr Ala Thr	Cys
710		715	720
Thr Thr Ala Thr	Thr Gly Ala Cys Cys	Thr Cys Cys Cys Ala	Ala
725		730	735
Ala Thr Ala Gly	Cys Ala Thr Gly Gly	Thr Ala Ala Gly Gly	Thr

740	745	750
Cys Ala Gly Thr Ala Cys Thr Gly Thr	Cys Ala Cys Thr Thr Cys	
755	760	765
Cys Cys Cys Cys Ala Cys Thr Thr Thr	Gly Ala Ala Gly Ala Thr	
770	775	780
Gly Ala Gly Gly Ala Gly Ala Gly Cys	Ala Cys Ala Ala Ala Thr	
785	790	795
Thr Cys Thr Ala Gly Ala Thr Gly Gly	Ala Ala Ala Thr Gly Gly	
800	805	810
Ala Gly Gly Thr Cys Ala Cys Gly Cys	Ala Gly Thr Gly Gly Ala	
815	820	825
Ala Ala Thr Ala Gly Gly Ala Thr Cys	Cys Ala Gly Ala Cys Ala	
830	835	840
Gly Ala Thr Thr Ala Ala Thr Cys Cys	Ala Ala Thr Cys Thr Cys	
845	850	855
Ala Ala Gly Cys Cys Thr Gly Ala Ala	Thr Thr Cys Thr Thr Cys	
860	865	870
Cys Ala Thr Thr Cys Cys Ala Cys Gly	Cys Thr Ala Cys Gly Cys	
875	880	885
Thr Thr Gly Ala Ala Gly Cys Thr Cys	Ala Ala Thr Cys Thr Cys	
890	895	900
Thr Cys Thr Thr Cys Cys Thr Gly Gly	Thr Thr Gly Ala Thr Thr	
905	910	915
Cys Thr Cys Cys Cys Cys Ala Cys Thr	Thr Cys Cys Cys Cys Ala	
920	925	930
Cys Cys Cys Cys Cys Ala Gly Ala Thr	Ala Thr Ala Thr Cys Cys	
935	940	945
Cys Ala Thr Cys Gly Cys Thr Gly Cys	Thr Thr Gly Gly Thr Gly	
950	955	960
Gly Ala Cys Ala Gly Thr Ala Gly Cys	Cys Ala Thr Gly Ala Cys	
965	970	975
Thr Gly Gly Gly Thr Thr Thr Thr Gly	Gly Thr Ala Ala Ala Gly	
980	985	990
Gly Thr Thr Gly Cys Thr Gly Ala Ala	Thr Ala Ala Thr Cys Ala	
995	1000	1005
Gly Gly Cys Thr Gly Cys Thr Gly Gly	Thr Thr Ala Gly Thr Thr	
1010	1015	1020
Thr Thr Thr Ala Cys Ala Thr Thr Thr	Cys Ala Cys Cys Thr Thr	
1025	1030	1035

Thr Cys Cys Cys Ala Gly Thr Gly Ala Ala Ala Thr Gly Gly Gly	1040	1045	1050
Gly Cys Cys Cys Cys Ala Thr Gly Ala Ala Ala Ala Gly Gly	1055	1060	1065
Cys Ala Gly Cys Thr Cys Ala Ala Gly Thr Thr Gly Thr Ala Ala	1070	1075	1080
Ala Thr Thr Ala Cys Thr Cys Ala Ala Ala Gly Gly Ala Ala Gly	1085	1090	1095
Gly Ala Cys Ala Gly Ala Ala Ala Gly Gly Thr Cys Thr Thr Cys	1100	1105	1110
Thr Gly Thr Thr Thr Gly Cys Ala Cys Cys Thr Ala Cys Cys Cys	1115	1120	1125
Thr Ala Ala Gly Gly Ala Thr Thr Thr Gly Gly Gly Gly Thr Ala	1130	1135	1140
Gly Ala Cys Ala Cys Thr Gly Gly Gly Ala Ala Thr Thr Thr Ala	1145	1150	1155
Cys Thr Ala Ala Thr Thr Ala Thr Gly Ala Ala Thr Thr Cys Cys	1160	1165	1170
Ala Gly Thr Gly Cys Thr Thr Thr Cys Cys Thr Thr Gly Cys Thr	1175	1180	1185
Gly Ala Ala Ala Gly Ala Gly Ala Gly Gly Cys Gly Thr Gly Gly	1190	1195	1200
Ala Ala Thr Cys Ala Ala Cys Gly Cys Thr Gly Ala Gly Thr Gly	1205	1210	1215
Ala Ala Gly Gly Cys Ala Thr Cys Ala Ala Gly Thr Thr Thr Ala	1220	1225	1230
Ala Gly Cys Thr Gly Cys Thr Ala Ala Thr Thr Ala Cys Thr Thr	1235	1240	1245
Cys Cys Thr Gly Ala Thr Cys Ala Thr Gly Cys Ala Gly Ala Ala	1250	1255	1260
Thr Ala Ala Ala Ala Gly Cys Thr Ala Cys Gly Thr Cys Cys Cys	1265	1270	1275
Thr Thr Gly Ala Ala Ala Thr Ala Cys Ala Cys Cys Ala Gly Gly	1280	1285	1290
Cys Ala Gly Cys Thr Ala Ala Ala Cys Ala Thr Ala Ala Thr Cys	1295	1300	1305
Thr Thr Thr Gly Cys Gly Thr Thr Thr Cys Cys Gly Thr Ala Gly	1310	1315	1320
Thr Gly Thr Thr Gly Gly Thr Thr Ala Ala Gly Gly Ala Ala Thr			

1325	1330	1335
Cys Cys Ala Gly Ala Thr Gly Thr Thr Ala Cys Thr Gly Cys Ala		
1340	1345	1350
Ala Thr Ala Ala Cys Cys Ala Cys Thr Cys Cys Ala Thr Ala Ala		
1355	1360	1365
Ala Cys Ala Ala Ala Ala Gly Gly Ala Ala Cys Ala Cys Cys Cys		
1370	1375	1380
Ala Gly Cys Thr Gly Thr Gly Ala Gly Ala Ala Cys Thr Gly Gly		
1385	1390	1395
Cys Thr Thr Cys Thr Cys Ala Gly Cys Ala Thr Thr Cys Gly Thr		
1400	1405	1410
Cys Cys Cys Ala Gly Cys Ala Gly Ala Gly Gly Cys Thr Cys Thr		
1415	1420	1425
Thr Cys Cys Gly Gly Gly Gly Cys Cys Ala Gly Cys Cys Cys Thr		
1430	1435	1440
Gly Gly Ala Ala Gly Ala Ala Cys Cys Cys Ala Thr Cys Ala Gly		
1445	1450	1455
Gly Gly Thr Thr Cys Thr Gly Ala Thr Gly Gly Thr Thr Gly Cys		
1460	1465	1470
Cys Cys Thr Gly Thr Thr Thr Cys Ala Gly Cys Ala Cys Ala Gly		
1475	1480	1485
Cys Cys Cys Thr Thr Ala Thr Thr Gly Gly Cys Ala Gly Gly Cys		
1490	1495	1500
Ala Gly Ala Cys Gly Gly Cys Thr Ala Cys Gly Gly Gly Cys Ala		
1505	1510	1515
Cys Ala Gly Cys Cys Ala Cys Ala Gly Gly Cys Thr Gly Ala Ala		
1520	1525	1530
Gly Gly Thr Gly Ala Gly Thr Cys Cys Ala Gly Cys Ala Cys Ala		
1535	1540	1545
Cys Ala Ala Cys Thr Thr Thr Cys Thr Gly Ala Cys Ala Gly Thr		
1550	1555	1560
Gly Ala Ala Cys Ala Gly Gly Ala Gly Thr Ala Ala Ala Cys Ala		
1565	1570	1575
Thr Gly Gly Gly Ala Cys Cys Cys Ala Cys Cys Cys Gly Ala Ala		
1580	1585	1590
Ala Cys Cys Thr Thr Thr Gly Thr Cys Thr Gly Thr Thr Gly Ala		
1595	1600	1605
Cys Thr Thr Cys Thr Thr Ala Gly Cys Ala Ala Ala Thr Gly Gly		
1610	1615	1620

				1910					1915					1920
Ala	Thr	Thr	Thr	Gly 1925	Gly	Thr	Thr	Cys	Ala 1930	Ala	Ala	Cys	Cys	Ala 1935
Gly	Cys	Cys	Thr	Thr 1940	Thr	Cys	Thr	Thr	Cys 1945	Thr	Thr	Thr	Cys	Ala 1950
Ala	Ala	Ala	Cys	Ala 1955	Ala	Cys	Thr	Thr	Cys 1960	Ala	Gly	Thr	Gly	Cys 1965
Ala	Ala	Thr	Thr	Cys 1970	Ala	Thr	Gly	Gly	Thr 1975	Thr	Thr	Thr	Gly	Gly 1980
Ala	Ala	Ala	Ala	Thr 1985	Ala	Ala	Ala	Cys	Thr 1990	Thr	Gly	Ala	Thr	Thr 1995
Thr	Thr	Gly	Ala	Gly 2000	Ala	Thr	Thr	Cys	Ala 2005	Gly	Ala	Cys	Ala	Ala 2010
Thr	Ala	Ala	Gly	Thr 2015	Gly	Cys	Ala	Thr	Thr 2020	Thr	Thr	Thr	Ala	Ala 2025
Thr	Gly	Thr	Thr	Thr 2030	Ala	Thr	Thr	Cys	Thr 2035	Thr	Thr	Thr	Ala	Thr 2040
Cys	Thr	Thr	Gly	Ala 2045	Ala	Ala	Ala	Ala	Cys 2050	Thr	Gly	Ala	Thr	Ala 2055
Thr	Ala	Thr	Thr	Thr 2060	Ala	Thr	Gly	Ala	Ala 2065	Ala	Thr	Gly	Ala	Thr 2070
Ala	Thr	Gly	Thr	Gly 2075	Cys	Thr	Cys	Ala	Cys 2080	Thr	Cys	Ala	Gly	Thr 2085
Gly	Thr	Cys	Ala	Ala 2090	Cys	Ala	Cys	Thr	Thr 2095	Cys	Ala	Ala	Ala	Cys 2100
Ala	Ala	Cys	Ala	Cys 2105	Ala	Gly	Ala	Cys	Ala 2110	Gly	Thr	Ala	Cys	Ala 2115
Ala	Thr	Gly	Ala	Cys 2120	Ala	Ala	Ala	Thr	Thr 2125	Gly	Gly	Ala	Gly	Ala 2130
Thr	Cys	Ala	Gly	Cys 2135	Thr	Cys	Thr	Ala	Ala 2140	Thr	Cys	Thr	Cys	Gly 2145
Gly	Cys	Cys	Cys	Cys 2150	Cys	Ala	Ala	Thr	Thr 2155	Thr	Ala	Ala	Thr	Gly 2160
Cys	Ala	Thr	Thr	Gly 2165	Cys	Thr	Gly	Ala	Ala 2170	Thr	Ala	Thr	Thr	Cys 2175
Thr	Thr	Cys	Thr	Gly 2180	Ala	Ala	Cys	Ala	Thr 2185	Ala	Gly	Thr	Cys	Cys 2190
Ala	Thr	Cys	Cys	Cys 2195	Ala	Cys	Ala	Cys	Thr 2200	Gly	Thr	Cys	Cys	Cys 2205

Ala Thr Gly Ala Cys Ala Cys Ala Ala Gly Ala Cys Gly Cys Thr	2210	2215	2220
Cys Cys Ala Ala Gly Gly Gly Gly Cys Thr Gly Ala Ala Gly Ala	2225	2230	2235
Thr Ala Gly Ala Gly Gly Gly Ala Cys Thr Thr Cys Thr Gly Cys	2240	2245	2250
Ala Gly Thr Cys Ala Ala Gly Ala Gly Ala Gly Cys Thr Gly Gly	2255	2260	2265
Gly Ala Ala Ala Cys Thr Cys Thr Thr Gly Gly Ala Cys Ala Gly	2270	2275	2280
Thr Cys Ala Cys Ala Ala Thr Gly Thr Gly Cys Ala Thr Thr Thr	2285	2290	2295
Gly Gly Gly Thr Ala Thr Thr Ala Ala Ala Gly Gly Cys Thr Cys	2300	2305	2310
Thr Gly Cys Ala Ala Ala Gly Thr Thr Cys Thr Gly Cys Ala Cys	2315	2320	2325
Cys Ala Ala Ala Thr Ala Ala Ala Cys Cys Cys Thr Thr Gly Gly	2330	2335	2340
Ala Thr Thr Gly Gly Cys Thr Thr Gly Ala Thr Cys Cys Ala Ala	2345	2350	2355
Thr Gly Cys Cys Ala Thr Gly Thr Thr Thr Cys Cys Ala Ala Ala	2360	2365	2370
Ala Cys Cys Thr Ala Cys Thr Thr Gly Cys Cys Cys Gly Thr Gly	2375	2380	2385
Gly Gly Ala Cys Ala Cys Cys Thr Thr Ala Gly Thr Cys Cys Ala	2390	2395	2400
Thr Ala Ala Cys Ala Cys Ala Gly Gly Thr Thr Gly Gly Cys Ala	2405	2410	2415
Thr Thr Thr Cys Thr Thr Cys Thr Ala Gly Ala Gly Ala Gly Thr	2420	2425	2430
Gly Thr Gly Cys Thr Gly Thr Gly Ala Ala Ala Ala Ala Cys Ala	2435	2440	2445
Cys Thr Gly Gly Thr Cys Thr Cys Ala Cys Ala Gly Cys Ala Cys	2450	2455	2460
Cys Gly Thr Gly Cys Ala Thr Thr Cys Ala Thr Cys Cys Ala Gly	2465	2470	2475
Cys Ala Gly Gly Thr Ala Thr Thr Thr Ala Cys Cys Ala Ala Gly	2480	2485	2490
Cys Ala Gly Gly Gly Ala Cys Thr Thr Thr Gly Gly Gly Cys Cys			

2495	2500	2505
Ala Gly Gly Thr Cys Cys Gly Thr Gly Cys Thr Ala Gly Gly Cys		
2510	2515	2520
Thr Cys Thr Gly Cys Ala Gly Gly Thr Gly Gly Ala Cys Cys Ala		
2525	2530	2535
Gly Cys Cys Ala Gly Cys Cys Cys Thr Gly Ala Cys Cys Thr Cys		
2540	2545	2550
Cys Ala Thr Gly Gly Thr Gly Thr Cys Thr Cys Thr Thr Cys Thr		
2555	2560	2565
Cys Ala Thr Gly Gly Gly Ala Gly Ala Gly Gly Cys Thr Gly Cys		
2570	2575	2580
Ala Cys Ala Gly Cys Ala Gly Thr Cys Ala Thr Thr Gly Ala Gly		
2585	2590	2595
Ala Ala Ala Ala Cys Gly Ala Ala Gly Ala Ala Ala Cys Ala Cys		
2600	2605	2610
Ala Cys Ala Gly Gly Thr Ala Cys Thr Thr Thr Cys Ala Gly Ala		
2615	2620	2625
Thr Gly Cys Thr Gly Ala Thr Ala Ala Thr Gly Ala Cys Thr Ala		
2630	2635	2640
Cys Cys Ala Thr Gly Thr Gly Cys Thr Ala Ala Ala Ala Gly Ala		
2645	2650	2655
Gly Cys Thr Cys Cys Ala Gly Gly Thr Gly Thr Thr Gly Thr Cys		
2660	2665	2670
Thr Gly Thr Thr Thr Thr Thr Gly Ala Gly Ala Cys Ala Ala Thr Cys		
2675	2680	2685
Thr Thr Cys Thr Cys Gly Ala Cys Ala Ala Thr Gly Ala Gly Ala		
2690	2695	2700
Thr Ala Gly Ala Ala Thr Gly Ala Ala Cys Cys Ala Thr Gly Cys		
2705	2710	2715
Ala Ala Ala Cys Thr Thr Thr Gly Gly Gly Gly Gly Cys Thr Ala		
2720	2725	2730
Cys Gly Ala Thr Gly Gly Thr Thr Thr Thr Ala Gly Gly Ala Ala		
2735	2740	2745
Ala Gly Ala Gly Cys Thr Ala Gly Ala Gly Thr Gly Ala Ala Ala		
2750	2755	2760
Ala Ala Thr Cys Cys Thr Thr Thr Gly Ala Cys Ala Thr Ala Thr		
2765	2770	2775
Ala Thr Ala Cys Ala Thr Ala Cys Ala Ala Ala Thr Ala Ala Ala		
2780	2785	2790

Thr Ala Ala Thr Gly	Thr Cys Ala Ala Ala Cys Thr Ala Cys Cys	
3095	3100	3105
Thr Thr Cys Cys Gly	Gly Ala Ala Ala Thr Gly Ala Thr Gly Cys	
3110	3115	3120
Thr Cys Ala Cys Thr	Thr Thr Ala Cys Thr Thr Thr Cys Cys Cys	
3125	3130	3135
Thr Cys Cys Ala Ala Gly	Ala Cys Thr Gly Thr Gly Thr Gly Ala	
3140	3145	3150
Ala Ala Ala Thr Gly	Cys Cys Cys Ala Thr Thr Thr Thr Cys Cys	
3155	3160	3165
Thr Ala Ala Ala Thr	Gly Cys Thr Thr Ala Cys Thr Ala Thr Gly	
3170	3175	3180
Ala Cys Thr Gly Gly	Thr Thr Thr Cys Cys Ala Ala Cys Thr Ala	
3185	3190	3195
Cys Ala Thr Thr Thr	Thr Ala Ala Thr Thr Cys Thr Thr Gly Thr	
3200	3205	3210
Thr Cys Ala Ala Thr	Cys Thr Gly Ala Thr Ala Gly Gly Cys Ala	
3215	3220	3225
Ala Ala Ala Ala Ala	Thr Gly Ala Thr Ala Thr Thr Thr Ala Ala	
3230	3235	3240
Thr Thr Thr Thr Thr	Ala Thr Thr Thr Gly Ala	
3245	3250	3255
Thr Ala Ala Thr Gly	Ala Cys Cys Thr Thr Gly Ala Ala Cys Gly	
3260	3265	3270
Thr Gly Cys Cys Cys	Ala Thr Thr Ala Gly Cys Cys Thr Thr Thr	
3275	3280	3285
Thr Gly Cys Ala Thr	Gly Thr Ala Thr Thr Cys Thr Thr Thr Thr	
3290	3295	3300
Ala Thr Gly Ala Ala	Ala Cys Ala Thr Cys Thr Gly Thr Thr Cys	
3305	3310	3315
Cys Thr Ala Thr Cys	Cys Thr Thr Cys Gly Thr Cys Ala Ala Thr	
3320	3325	3330
Gly Thr Thr Cys Cys	Thr Cys Thr Thr Cys Ala Thr Ala Thr Gly	
3335	3340	3345
Thr Thr Ala Ala Cys	Thr Thr Thr Thr Cys Thr Thr Ala Thr Thr	
3350	3355	3360
Gly Ala Thr Thr Thr	Gly Thr Thr Ala Gly Ala Gly Cys Ala Cys	
3365	3370	3375

Thr Cys Cys Cys Ala Ala Ala Thr Gly Gly Thr Gly Ala Thr Thr	3665	3670	3675
3680	3685	3690	
Cys Ala Gly Cys Thr Gly Thr Thr Cys Cys Ala Thr Thr Thr Cys	3695	3700	3705
Cys Ala Thr Ala Thr Thr Cys Thr Cys Cys Cys Thr Thr Ala Thr	3710	3715	3720
Thr Ala Gly Ala Ala Ala Thr Gly Ala Cys Cys Ala Cys Thr Ala	3725	3730	3735
Thr Ala Thr Thr Ala Thr Gly Thr Thr Cys Thr Ala Ala Ala Ala	3740	3745	3750
Thr Ala Thr Cys Thr Gly Cys Gly Thr Ala Cys Thr Thr Gly Thr	3755	3760	3765
Gly Thr Cys Cys Cys Thr Thr Cys Cys Thr Ala Thr Ala Ala Thr	3770	3775	3780
Cys Thr Cys Ala Gly Thr Thr Cys Ala Thr Cys Thr Cys Thr Thr	3785	3790	3795
Thr Gly Ala Gly Cys Thr Ala Thr Cys Thr Thr Thr Thr Gly Ala	3800	3805	3810
Thr Thr Cys Cys Thr Thr Thr Thr Thr Cys Ala Ala Ala Cys Cys	3815	3820	3825
Ala Cys Ala Cys Thr Gly Cys Thr Thr Thr Ala Cys Thr Gly Ala	3830	3835	3840
Ala Cys Thr Gly Thr Cys Ala Thr Cys Ala Thr Cys Thr Thr Ala	3845	3850	3855
Thr Ala Cys Ala Thr Thr Thr Thr Thr Ala Ala Thr Ala Cys Thr	3860	3865	3870
Cys Ala Gly Cys Ala Ala Gly Ala Cys Ala Ala Gly Thr Thr Thr	3875	3880	3885
Cys Thr Cys Ala Ala Thr Gly Cys Cys Ala Cys Thr Cys Thr Thr	3890	3895	3900
Thr Thr Thr Cys Ala Gly Ala Gly Thr Thr Thr Thr Thr Cys Thr	3905	3910	3915
Gly Gly Thr Gly Gly Thr Thr Gly Thr Ala Ala Gly Ala Thr Gly	3920	3925	3930
Thr Thr Thr Ala Thr Thr Cys Thr Thr Cys Thr Gly Gly Ala Thr	3935	3940	3945
Ala Ala Ala Cys Thr Thr Thr Ala Gly Ala Ala Thr Cys Ala Cys	3950	3955	3960

Thr Cys Thr Thr Thr Thr Thr Thr Gly Thr Cys Cys Ala Ala Gly Gly	3965	3970	3975
Thr Ala Ala Ala Ala Thr Ala Thr Ala Thr Cys Cys Cys Ala Cys	3980	3985	3990
Ala Thr Thr Gly Ala Gly Ala Thr Cys Ala Thr Ala Cys Thr Gly	3995	4000	4005
Ala Ala Thr Ala Thr Ala Cys Ala Gly Ala Cys Thr Ala Ala Thr	4010	4015	4020
Thr Cys Ala Gly Gly Ala Ala Ala Ala Ala Thr Gly Thr Ala	4025	4030	4035
Thr Gly Thr Cys Thr Thr Thr Ala Thr Thr Gly Cys Ala Thr Thr	4040	4045	4050
Gly Ala Gly Thr Cys Thr Thr Cys Thr Thr Ala Thr Cys Cys Ala	4055	4060	4065
Ala Thr Ala Ala Ala Ala Ala Ala Ala Gly Ala Thr Ala Thr Gly Ala	4070	4075	4080
Ala Thr Thr Thr Cys Cys Ala Thr Gly Thr Ala Thr Thr Gly Ala	4085	4090	4095
Ala Ala Thr Cys Thr Thr Cys Ala Cys Thr Gly Ala Gly Ala Cys	4100	4105	4110
Thr Thr Ala Thr Thr Thr Thr Thr Gly Gly Cys Thr Thr Thr Thr	4115	4120	4125
Cys Ala Cys Ala Thr Gly Thr Cys Cys Thr Gly Cys Ala Ala Ala	4130	4135	4140
Thr Gly Thr Ala Thr Thr Gly Thr Thr Ala Ala Ala Thr Thr Thr	4145	4150	4155
Ala Thr Thr Thr Thr Thr Ala Gly Gly Thr Ala Thr Thr Thr Thr	4160	4165	4170
Ala Gly Gly Gly Gly Ala Ala Ala Thr Gly Ala Thr Thr Thr Thr	4175	4180	4185
Cys Thr Ala Ala Ala Gly Thr Thr Thr Gly Thr Ala Thr Thr Thr	4190	4195	4200
Thr Cys Thr Ala Gly Cys Thr Thr Gly Thr Thr Ala Thr Ala Ala	4205	4210	4215
Thr Thr Thr Ala Cys Ala Thr Ala Thr Gly Ala Gly Ala Thr Ala	4220	4225	4230
Gly Thr Cys Ala Thr Thr Gly Thr Thr Gly Thr Ala Thr Ala Thr	4235	4240	4245
Thr Ala Thr Thr Thr Ala Thr Ala Ala Cys Thr Gly Ala Thr Cys			

4250	4255	4260
Ala Thr Ala Thr Thr Ala Cys Thr Gly Thr Ala Thr Thr Thr Gly		
4265	4270	4275
Thr Ala Thr Thr Gly Thr Thr Thr Thr Ala Ala Thr Ala Gly Thr		
4280	4285	4290
Thr Thr Thr Thr Cys Thr Ala Thr Thr Ala Thr Thr Thr Thr Gly		
4295	4300	4305
Gly Gly Thr Thr Thr Thr Cys Cys Thr Gly Gly Ala Ala Thr Ala		
4310	4315	4320
Cys Ala Ala Cys Cys Thr Thr Ala Thr Thr Ala Thr Cys Thr Ala		
4325	4330	4335
Cys Ala Ala Ala Thr Thr Ala Thr Gly Ala Thr Thr Gly Thr Thr		
4340	4345	4350
Thr Thr Gly Cys Cys Thr Thr Thr Thr Cys Cys Ala Ala Thr Gly		
4355	4360	4365
Thr Thr Cys Ala Thr Ala Ala Cys Thr Gly Thr Thr Thr Thr Thr		
4370	4375	4380
Ala Thr Ala Thr Thr Cys Thr Thr Gly Thr Cys Thr Gly Ala Thr		
4385	4390	4395
Thr Gly Cys Thr Thr Thr Gly Thr Thr Cys Ala Gly Cys Ala Cys		
4400	4405	4410
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 <211> 100
 <212> PRT
 <213> Homo Sapien

<400> 526
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 20 25 30
 Cys Val Cys Val Tyr Met Cys Met Cys Val Leu Cys Ala Cys Val
 35 40 45
 Cys Thr Cys Arg Lys Lys Val Met Cys Gly Asn Gly Glu Phe Gln
 50 55 60
 Pro Arg Arg Arg Leu Cys Leu Gly Leu Pro Arg Glu Val Val Thr
 65 70 75

Leu Arg Glu Thr Gly Ser Lys Cys Thr Leu Pro Ser Ser Ser Leu
80 85 90

Cys Asp Leu Gly Gln Val Thr Ser Ala Pro
95 100

<210> 527
<211> 957
<212> DNA
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<400> 527
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tcttgatcat agttagttgg acaacttggt gagcactagc catacttctt 150
tcttatcttt actatgtgtt taagggtgtt catctgcaag ccagcttaac 200
aacttttaag aatagccagc ctgtgaatcc caaacactct agaagaagtg 250
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tctgccaaag atgctgaaga tagccttcgc atgcacagta ctgtgattaa 350
cttactaaca tggattgtat tactcagcat gccttctcta atttattggc 400
taaagaatct taggtattat tttaaactta atcctgatcc atgtaaacct 450
ttggcattta tccttattcc gactatggca attccttgga atacttacac 500
tgtttcaata aaatcaagta aattgttgaa gactacttca caatttccac 550
ttcctctggc tggtggtgtg attgcttttg ggtcagcaca tttatatagg 600
cttccatgct ttgtcttcat tcctctttta ctccatgcat tatgcaactt 650
tatgtaagat tggacttaag gaatgatgaa gataatttat gtgttttaggg 700
ccagtataaa gaggaacac acagatccat cagtatggac agcaagatcc 750
tttgagaag acaagtctat ttttacaata ttgaaaatag gaaattagtt 800
ttgtaatgtt tgagggaagt agttgaagca tggttttgtt ttgtggtgtg 850
gaatccatgt actaatcatt tttgaaaaat tcatgaaggg atatatggtg 900
atcactatca ttgaggactc ctgtgcatat aaaatagtct gttttatcaa 950
ctgtaaa 957

<210> 528
<211> 196
<212> PRT
<213> Homo Sapien

<400> 528

Met	Ile	Ser	Pro	Asp	Leu	Pro	Phe	Leu	Thr	Ile	Val	Leu	Ile	Ile	1	5	10	15
Val	Ser	Trp	Thr	Thr	Cys	Gly	Ala	Leu	Ala	Ile	Leu	Leu	Ser	Tyr	20	25	30	
Leu	Tyr	Tyr	Val	Phe	Lys	Val	Val	His	Leu	Gln	Ala	Ser	Leu	Thr	35	40	45	
Thr	Phe	Lys	Asn	Ser	Gln	Pro	Val	Asn	Pro	Lys	His	Ser	Arg	Arg	50	55	60	
Ser	Glu	Lys	Lys	Ser	Asn	His	His	Lys	Asp	Ser	Ser	Ile	His	His	65	70	75	
Leu	Arg	Leu	Ser	Ala	Asn	Asp	Ala	Glu	Asp	Ser	Leu	Arg	Met	His	80	85	90	
Ser	Thr	Val	Ile	Asn	Leu	Leu	Thr	Trp	Ile	Val	Leu	Leu	Ser	Met	95	100	105	
Pro	Ser	Leu	Ile	Tyr	Trp	Leu	Lys	Asn	Leu	Arg	Tyr	Tyr	Phe	Lys	110	115	120	
Leu	Asn	Pro	Asp	Pro	Cys	Lys	Pro	Leu	Ala	Phe	Ile	Leu	Ile	Pro	125	130	135	
Thr	Met	Ala	Ile	Leu	Gly	Asn	Thr	Tyr	Thr	Val	Ser	Ile	Lys	Ser	140	145	150	
Ser	Lys	Leu	Leu	Lys	Thr	Thr	Ser	Gln	Phe	Pro	Leu	Pro	Leu	Ala	155	160	165	
Val	Gly	Val	Ile	Ala	Phe	Gly	Ser	Ala	His	Leu	Tyr	Arg	Leu	Pro	170	175	180	
Cys	Phe	Val	Phe	Ile	Pro	Leu	Leu	Leu	His	Ala	Leu	Cys	Asn	Phe	185	190	195	
Met																		

<210> 529
 <211> 1997
 <212> DNA
 <213> Homo Sapien

<400> 529
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 tctccttcta cctaattttc accaatgagg gccgcgcatt gaagacggca 200
 acctcattgg ctgaggggct ctcgcttggt gtgtctcccg acagcatcca 250

cagtgtggct ccggagaatg aaggaaggct ggtgcacatc attggcgctt 300
 tacggacatc caagcttttg tctgatccaa actatggggg ccatcttccg 350
 gctgtgaaac tgcggaggca cgtggagatg taccaatggg tagaaactga 400
 ggagtccagg gagtacaccg aggatgggca ggtgaagaag gagacgaggt 450
 attcctacaa cactgaatgg aggtcagaaa tcatcaacag caaaaacttc 500
 gaccgagaga ttggccacaa aaaccccgat gccatggcag tggagtcatt 550
 catggcaaca gcccccttg tccaaattgg cagggttttc ctctcgtcag 600
 gcctcatcga caaagtcgac aacttcaagt ccctgagcct atccaagctg 650
 gaggaccctc atgtggacat cattcgccgt ggagactttt tctaccacag 700
 cgaaaatccc aagtatccag aggtgggaga cttgctgtgc tccttttcct 750
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 gatcctctac accttggtgg actggtttcc tgttttcga gacctggtca 1050
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 ctgaccgtgg cggctggctg gctcttctac cgacctgt gggccctcct 1150
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 cagccaaaaa gttggagtga aaagacctg gcacccgccc gacacctgcg 1250
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 cctgggagtg ctttcgatgt gggcacctgg gcttcctagg gctgcttctg 1350
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 tccaccaca cctaagtcac agaatttcta agttcccaa ctactctcac 1450
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 ttgtgtacct tttctgtcat attcagaaac cgttctgtgc ctgctgggag 1550
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 tctgaaacca gagatctgta atcatctcta ttggcctggg gtgcctgtgc 1650
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 atacctagat gatgactaaa tgcaaaatcc ttgggctttg gtttttttct 1850
 agtaaggatt ttaaataact gccgacttca aaagtgttct taaaacgaaa 1900
 gataatgtta agaaaaattht gaaagctttg gaaaacccaaa tttgtaatat 1950
 cattgtattht tttattaaaa gttttgtaat aaattttctaa attatca 1997

<210> 530

<211> 400

<212> PRT

<213> Homo Sapien

<400> 530

Met	Ala	Ala	Asn	Tyr	Ser	Ser	Thr	Ser	Thr	Arg	Arg	Glu	His	Val
1				5					10					15
Lys	Val	Lys	Thr	Ser	Ser	Gln	Pro	Gly	Phe	Leu	Glu	Arg	Leu	Ser
				20					25					30
Glu	Thr	Ser	Gly	Gly	Met	Phe	Val	Gly	Leu	Met	Ala	Phe	Leu	Leu
				35					40					45
Ser	Phe	Tyr	Leu	Ile	Phe	Thr	Asn	Glu	Gly	Arg	Ala	Leu	Lys	Thr
				50					55					60
Ala	Thr	Ser	Leu	Ala	Glu	Gly	Leu	Ser	Leu	Val	Val	Ser	Pro	Asp
				65					70					75
Ser	Ile	His	Ser	Val	Ala	Pro	Glu	Asn	Glu	Gly	Arg	Leu	Val	His
				80					85					90
Ile	Ile	Gly	Ala	Leu	Arg	Thr	Ser	Lys	Leu	Leu	Ser	Asp	Pro	Asn
				95					100					105
Tyr	Gly	Val	His	Leu	Pro	Ala	Val	Lys	Leu	Arg	Arg	His	Val	Glu
				110					115					120
Met	Tyr	Gln	Trp	Val	Glu	Thr	Glu	Glu	Ser	Arg	Glu	Tyr	Thr	Glu
				125					130					135
Asp	Gly	Gln	Val	Lys	Lys	Glu	Thr	Arg	Tyr	Ser	Tyr	Asn	Thr	Glu
				140					145					150
Trp	Arg	Ser	Glu	Ile	Ile	Asn	Ser	Lys	Asn	Phe	Asp	Arg	Glu	Ile
				155					160					165
Gly	His	Lys	Asn	Pro	Ser	Ala	Met	Ala	Val	Glu	Ser	Phe	Met	Ala
				170					175					180
Thr	Ala	Pro	Phe	Val	Gln	Ile	Gly	Arg	Phe	Phe	Leu	Ser	Ser	Gly
				185					190					195
Leu	Ile	Asp	Lys	Val	Asp	Asn	Phe	Lys	Ser	Leu	Ser	Leu	Ser	Lys

200	205	210
Leu Glu Asp Pro His Val Asp Ile Ile	Arg Arg Gly Asp Phe Phe	
215	220	225
Tyr His Ser Glu Asn Pro Lys Tyr Pro	Glu Val Gly Asp Leu Arg	
230	235	240
Val Ser Phe Ser Tyr Ala Gly Leu Ser	Gly Asp Asp Pro Asp Leu	
245	250	255
Gly Pro Ala His Val Val Thr Val Ile	Ala Arg Gln Arg Gly Asp	
260	265	270
Gln Leu Val Pro Phe Ser Thr Lys Ser	Gly Asp Thr Leu Leu Leu	
275	280	285
Leu His His Gly Asp Phe Ser Ala Glu	Glu Val Phe His Arg Glu	
290	295	300
Leu Arg Ser Asn Ser Met Lys Thr Trp	Gly Leu Arg Ala Ala Gly	
305	310	315
Trp Met Ala Met Phe Met Gly Leu Asn	Leu Met Thr Arg Ile Leu	
320	325	330
Tyr Thr Leu Val Asp Trp Phe Pro Val	Phe Arg Asp Leu Val Asn	
335	340	345
Ile Gly Leu Lys Ala Phe Ala Phe Cys	Val Ala Thr Ser Leu Thr	
350	355	360
Leu Leu Thr Val Ala Ala Gly Trp Leu	Phe Tyr Arg Pro Leu Trp	
365	370	375
Ala Leu Leu Ile Ala Gly Leu Ala Leu	Val Pro Ile Leu Val Ala	
380	385	390
Arg Thr Arg Val Pro Ala Lys Lys Leu	Glu	
395	400	

<210> 531
 <211> 539
 <212> DNA
 <213> Homo Sapien

<400> 531
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 ggaaacttga gagaaatggg caataactgt tactttaaaa gcttgggtgc 150
 tgtgattctg ccttcagcct cagccacttt tgtggtgctt tgcgtggcat 200
 cagtacctcc actgattctt ctgtctttcc tctctctctt cccccctct 250
 ttcccttctg tttttctcag atctaagggt tataatggag gggcaaactg 300

cctggctatt tcagataaga cttcactgag tgactgttca gcccatgatt 350
 taccctgcag ttttaacaggc tcaggaatta ggtcgcacatca gttgagcgcg 400
 ggctcacttag gcctataatc atcatcagac ggcaattaaa ggaccatttc 450
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 tagataactca ataaatattt gctgaatgat aaccaataa 539

<210> 532
 <211> 100
 <212> PRT
 <213> Homo Sapien

<400> 532
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 20 25 30
 Pro Pro Leu Ile Leu Leu Ser Phe Leu Ser Leu Phe Pro Pro Ser
 35 40 45
 Phe Pro Ser Val Phe Leu Arg Ser Lys Gly Tyr Asn Gly Gly Ala
 50 55 60
 Asn Cys Leu Ala Ile Ser Asp Lys Thr Ser Leu Ser Asp Cys Ser
 65 70 75
 Ala His Asp Leu Pro Cys Ser Leu Thr Gly Ser Gly Ile Arg Ser
 80 85 90
 His Gln Leu Ser Ala Gly His Leu Gly Leu
 95 100

<210> 533
 <211> 2048
 <212> DNA
 <213> Homo Sapien

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 ccaggcgggc aaagggtga tgcggtagt ccccatcctg gaggggcagg 150
 ctctgcgcac ctgctcctgg catggcgctg cggcacctcg ccctcctggc 200
 tggccttctc gtgggagtcg ccagcaagtc catggagaac acggcccagc 250
 tgcccagtg ctgtgtggat gtggtggcg tcaacgccag ctgccaggc 300
 gcaagtctgt gtggtccagg ctgttacagg cgctggaacg cggacgggag 350
 cgccagctgc gtccgctgtg ggaacggaac cctcccagcc tacaacggct 400

ccgagtgtag aagctttgct ggcccgggtg cgccattccc catgaacaga 450
agctcagggg cccccgggcg gccacatcct ggggctccgc gcgtagggcg 500
ctccctcttc ctgggcacgt tcttcattag ctccggcctc atcctctccg 550
tagctggggtt cttctacctc aagcgctcca gtaaactccc cagggcctgc 600
tacagaagaa acaaagctcc ggccctgcag cctggcgaag ccgctgcaat 650
gatecccccg ccacagtcct cagacgtggg gtctgcagga aaggaggacc 700
caccacgaca gggcagaccc ccaatacctg ctctccttg aagtccagct 750
ccaccgagg acagacgcag ccggcctccg ccaggccctc ctgagcagcc 800
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cgggaaccag cacaaagtgt tggcatcgcc cggcgcccg gacagtcctg 1050
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cccacgctcc tttgcgaagt ccactgtggg tgccatcatg gtctccggga 1950
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cattactcaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaa 2048

<210> 534
<211> 189
<212> PRT
<213> Homo Sapien

<400> 534
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20 25 30
Cys Val Asp Val Val Gly Val Asn Ala Ser Cys Pro Gly Ala Ser
35 40 45
Leu Cys Gly Pro Gly Cys Tyr Arg Arg Trp Asn Ala Asp Gly Ser
50 55 60
Ala Ser Cys Val Arg Cys Gly Asn Gly Thr Leu Pro Ala Tyr Asn
65 70 75
Gly Ser Glu Cys Arg Ser Phe Ala Gly Pro Gly Ala Pro Phe Pro
80 85 90
Met Asn Arg Ser Ser Gly Thr Pro Gly Arg Pro His Pro Gly Ala
95 100 105
Pro Arg Val Ala Ala Ser Leu Phe Leu Gly Thr Phe Phe Ile Ser
110 115 120
Ser Gly Leu Ile Leu Ser Val Ala Gly Phe Phe Tyr Leu Lys Arg
125 130 135
Ser Ser Lys Leu Pro Arg Ala Cys Tyr Arg Arg Asn Lys Ala Pro
140 145 150
Ala Leu Gln Pro Gly Glu Ala Ala Ala Met Ile Pro Pro Pro Gln
155 160 165
Ser Ser Asp Val Gly Ser Ala Gly Lys Glu Asp Pro Pro Arg Gln
170 175 180
Gly Arg Pro Pro Ile Pro Ala Pro Pro
185

<210> 535
<211> 1106
<212> DNA
<213> Homo Sapien

<400> 535

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gcaggagggc cggcggagcg ccattggcctg catcctgaag agaaagtctg 150
tgattgctgt gagcttcata gcagcgttcc ttttctgct ggttgtgcgt 200
cttgtaaagt aagtgaattt ccattgcta ctaaactgct ttggacaacc 250
tggatacaaag tggataccat tctcctacac atacaggcgg ccccttcgaa 300
ctcactatgg atacataaat gtgaagacac aagagccttt gcaactggac 350
tgtgaccttt gtgccatagt gtcaaactca ggtcagatgg ttggccagaa 400
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ccccaccaa aggttatgaa gaagatgtcg gccgcatgac catgattcga 500
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gttggtatct atccgaatgc ccaaataac gtgaccacag agaagcgcac 700
gagttactgt gatggagttt ttaagaagga aactgggaag gacagtacag 750
agtgaccatg cagtgttgat tgatcgaaca gcaaccacca catacatgtc 800
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aagggaatt gtggtatgtg gtatgtaaat atttttaaat gttgtctctc 1050
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aaagca 1106

<210> 536

<211> 210

<212> PRT

<213> Homo Sapien

<400> 536

Met	Ala	Cys	Ile	Leu	Lys	Arg	Lys	Ser	Val	Ile	Ala	Val	Ser	Phe
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Ile	Ala	Ala	Phe	Leu	Phe	Leu	Leu	Val	Val	Arg	Leu	Val	Asn	Glu
				20					25					30

Val	Asn	Phe	Pro	Leu	Leu	Leu	Asn	Cys	Phe	Gly	Gln	Pro	Gly	Thr
				35					40					45
Lys	Trp	Ile	Pro	Phe	Ser	Tyr	Thr	Tyr	Arg	Arg	Pro	Leu	Arg	Thr
				50					55					60
His	Tyr	Gly	Tyr	Ile	Asn	Val	Lys	Thr	Gln	Glu	Pro	Leu	Gln	Leu
				65					70					75
Asp	Cys	Asp	Leu	Cys	Ala	Ile	Val	Ser	Asn	Ser	Gly	Gln	Met	Val
				80					85					90
Gly	Gln	Lys	Val	Gly	Asn	Glu	Ile	Asp	Arg	Ser	Ser	Cys	Ile	Trp
				95					100					105
Arg	Met	Asn	Asn	Ala	Pro	Thr	Lys	Gly	Tyr	Glu	Glu	Asp	Val	Gly
				110					115					120
Arg	Met	Thr	Met	Ile	Arg	Val	Val	Ser	His	Thr	Ser	Val	Pro	Leu
				125					130					135
Leu	Leu	Lys	Asn	Pro	Asp	Tyr	Phe	Phe	Lys	Glu	Ala	Asn	Thr	Thr
				140					145					150
Ile	Tyr	Val	Ile	Trp	Gly	Pro	Phe	Arg	Asn	Met	Arg	Lys	Asp	Gly
				155					160					165
Asn	Gly	Ile	Val	Tyr	Asn	Met	Leu	Lys	Lys	Thr	Val	Gly	Ile	Tyr
				170					175					180
Pro	Asn	Ala	Gln	Ile	Tyr	Val	Thr	Thr	Glu	Lys	Arg	Met	Ser	Tyr
				185					190					195
Cys	Asp	Gly	Val	Phe	Lys	Lys	Glu	Thr	Gly	Lys	Asp	Ser	Thr	Glu
				200					205					210

<210> 537
 <211> 1333
 <212> DNA
 <213> Homo Sapien

<400> 537
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 tagccactag ttttgtcctt gggagcctgg ggttggcctt ctacctgcct 200
 ttggtggtga ctacacctaa aacactggcc atccctgaga agctgcaaga 250
 agctgtgggg aaagttatca tcaatgccac aacctgtact gtcacctgtg 300
 gccttggtta taaggaggag accgtctgtg aggtgggccc tgatggagtg 350
 agaaggaaat gtcagactca gcgcttagaa tgtctgacca actggatctg 400

tgggatgctc catttcacca ttctcattgg caaggaattt gagcttagct 450
 gtctgagttc agacatcttg gagtttggac aggaagcttt ccggttcacc 500
 tggagacttg ctcgaggtgt catctccact gacgatgagg tcttcaaacc 550
 ctttcaagcc aactcccact ttgtgaagtt taaatatgct caggagtatg 600
 actctgggac atatcgctgt gatgtgcagc tggtaaaaaa cttgagactt 650
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 tctgaatttc catcagtcac ttactgagga tcagaagtta atagatgagg 750
 gattggaagt taatctggac agctactcca agcctcacca cccaaagtgg 800
 aaaaagaagg tggcgtcagc cttgggaata ggaattgcca ttggagtggg 850
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 agcagtgaca gcttcaagaa cttaacagcc ttgctcctga agaactggct 950
 gcccaggaag ccaagctagc tttttagggg agtggtccag ctgctggtag 1000
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 aatggagggg acaatctcct gggagctatg cgcagtaacc taacttcctt 1100
 atgtcccatg gatctcttcc tgatcttccc tgcccattgg gtaccagga 1150
 aactgcaagc attgcctgtg ttcttgggaa gagttctaag aagcttgcat 1200
 tcattttcta ccctttatga cttggatgcc tccccacctc catttcccct 1250
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<210> 538

<211> 255

<212> PRT

<213> Homo Sapien

<400> 538

Met	Lys	Val	Leu	Ala	Thr	Ser	Phe	Val	Leu	Gly	Ser	Leu	Gly	Leu
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Ala	Phe	Tyr	Leu	Pro	Leu	Val	Val	Thr	Thr	Pro	Lys	Thr	Leu	Ala
				20					25					30
Ile	Pro	Glu	Lys	Leu	Gln	Glu	Ala	Val	Gly	Lys	Val	Ile	Ile	Asn
				35					40					45
Ala	Thr	Thr	Cys	Thr	Val	Thr	Cys	Gly	Leu	Gly	Tyr	Lys	Glu	Glu
				50					55					60
Thr	Val	Cys	Glu	Val	Gly	Pro	Asp	Gly	Val	Arg	Arg	Lys	Cys	Gln
				65					70					75

Thr	Gln	Arg	Leu	Glu	Cys	Leu	Thr	Asn	Trp	Ile	Cys	Gly	Met	Leu
				80					85					90
His	Phe	Thr	Ile	Leu	Ile	Gly	Lys	Glu	Phe	Glu	Leu	Ser	Cys	Leu
				95					100					105
Ser	Ser	Asp	Ile	Leu	Glu	Phe	Gly	Gln	Glu	Ala	Phe	Arg	Phe	Thr
				110					115					120
Trp	Arg	Leu	Ala	Arg	Gly	Val	Ile	Ser	Thr	Asp	Asp	Glu	Val	Phe
				125					130					135
Lys	Pro	Phe	Gln	Ala	Asn	Ser	His	Phe	Val	Lys	Phe	Lys	Tyr	Ala
				140					145					150
Gln	Glu	Tyr	Asp	Ser	Gly	Thr	Tyr	Arg	Cys	Asp	Val	Gln	Leu	Val
				155					160					165
Lys	Asn	Leu	Arg	Leu	Val	Lys	Arg	Leu	Tyr	Phe	Gly	Leu	Arg	Val
				170					175					180
Leu	Pro	Pro	Asn	Leu	Val	Asn	Leu	Asn	Phe	His	Gln	Ser	Leu	Thr
				185					190					195
Glu	Asp	Gln	Lys	Leu	Ile	Asp	Glu	Gly	Leu	Glu	Val	Asn	Leu	Asp
				200					205					210
Ser	Tyr	Ser	Lys	Pro	His	His	Pro	Lys	Trp	Lys	Lys	Lys	Val	Ala
				215					220					225
Ser	Ala	Leu	Gly	Ile	Gly	Ile	Ala	Ile	Gly	Val	Val	Gly	Gly	Val
				230					235					240
Leu	Val	Arg	Ile	Val	Leu	Cys	Ala	Leu	Arg	Gly	Gly	Leu	Gln	Gln
				245					250					255

<210> 539
 <211> 647
 <212> DNA
 <213> Homo Sapien

<400> 539
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 ctggtcctca gcaccagaca ggactatgaa gagctagaaa agcagctgaa 200
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 caagagaact tgatggaatt aaagtcaatc ttcagtcctt aaaaaacgat 300
 gagcagtctg ccaaaaactga tgttcagaaa cttctggaat taggacagaa 350
 acaaagagaa gaaatgaagt ctcttcagga ggcctgcaa aatcagctta 400

aggagacatc agagaaagca gaaaaacacc aggctactat taatttttta 450
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ggattcaagg aagagaccaa gagatctcca gtggaagata gtctccatga 550
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agatttatat tagatacaaa ataaatatgt gtggaattaa ttaataa 647

<210> 540

<211> 159

<212> PRT

<213> Homo Sapien

<400> 540

Met	Lys	Phe	Ser	Pro	Ala	His	Tyr	Leu	Leu	Pro	Leu	Leu	Pro	Ala
1				5				10					15	
Leu	Val	Leu	Ser	Thr	Arg	Gln	Asp	Tyr	Glu	Glu	Leu	Glu	Lys	Gln
				20				25					30	
Leu	Lys	Glu	Val	Phe	Lys	Glu	Arg	Ser	Thr	Ile	Leu	Arg	Gln	Leu
				35				40					45	
Thr	Lys	Thr	Ser	Arg	Glu	Leu	Asp	Gly	Ile	Lys	Val	Asn	Leu	Gln
				50				55					60	
Ser	Leu	Lys	Asn	Asp	Glu	Gln	Ser	Ala	Lys	Thr	Asp	Val	Gln	Lys
				65				70					75	
Leu	Leu	Glu	Leu	Gly	Gln	Lys	Gln	Arg	Glu	Glu	Met	Lys	Ser	Leu
				80				85					90	
Gln	Glu	Ala	Leu	Gln	Asn	Gln	Leu	Lys	Glu	Thr	Ser	Glu	Lys	Ala
				95				100					105	
Glu	Lys	His	Gln	Ala	Thr	Ile	Asn	Phe	Leu	Lys	Thr	Glu	Val	Glu
				110				115					120	
Arg	Lys	Ser	Lys	Met	Ile	Arg	Asp	Leu	Gln	Asn	Glu	Asp	Ser	Arg
				125				130					135	
Lys	Arg	Pro	Arg	Asp	Leu	Gln	Trp	Lys	Ile	Val	Ser	Met	Arg	Thr
				140				145					150	
Met	Ser	Ile	Tyr	Leu	Leu	Met	Tyr	Leu						
				155										

<210> 541

<211> 906

<212> DNA

<213> Homo Sapien

<400> 541

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 aaaaaa 906

<210> 542
 <211> 178
 <212> PRT
 <213> Homo Sapien

<400> 542
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 Ile Leu Pro Thr Arg Gly Gln Thr Leu Lys Asp Thr Thr Ser Ser
 20 25 30
 Ser Ser Ala Asp Ser Thr Ile Met Asp Ile Gln Val Pro Thr Arg
 35 40 45
 Ala Pro Asp Ala Val Tyr Thr Glu Leu Gln Pro Thr Ser Pro Thr
 50 55 60
 Pro Thr Trp Pro Ala Asp Glu Thr Pro Gln Pro Gln Thr Gln Thr
 65 70 75
 Gln Gln Leu Glu Gly Thr Asp Gly Pro Leu Val Thr Asp Pro Glu
 80 85 90

Thr	His	Lys	Ser	Thr	Lys	Ala	Ala	His	Pro	Thr	Asp	Asp	Thr	Thr
				95					100					105
Thr	Leu	Ser	Glu	Arg	Pro	Ser	Pro	Ser	Thr	Asp	Val	Gln	Thr	Asp
				110					115					120
Pro	Gln	Thr	Leu	Lys	Pro	Ser	Gly	Phe	His	Glu	Asp	Asp	Pro	Phe
				125					130					135
Phe	Tyr	Asp	Glu	His	Thr	Leu	Arg	Lys	Arg	Gly	Leu	Leu	Val	Ala
				140					145					150
Ala	Val	Leu	Phe	Ile	Thr	Gly	Ile	Ile	Ile	Leu	Thr	Ser	Gly	Lys
				155					160					165
Cys	Arg	Gln	Leu	Ser	Arg	Leu	Cys	Arg	Asn	Arg	Cys	Arg		
				170					175					

<210> 543
 <211> 1024
 <212> DNA
 <213> Homo Sapien

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 caaggcgggg ccttggttct ggcagaaggg acgctatgac cgcagaattc 200
 ctctccctgc tttgcctcgg gctgtgtctg ggctacgaag atgagaaaaa 250
 gaatgagaaa ccgccaagc cctccctcca cgccctggccc agctcgggtg 300
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 tggtcagaaa gcagtgaaca cttgcagctg gtggtcacag ataaacacga 550
 tgaacttgaa gctccctcaa tgaaaacaga caccagaacc atctttgtcg 600
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aataaaatta agtttctcgt ctta 1024

<210> 544
<211> 236
<212> PRT
<213> Homo Sapien

<400> 544
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Gly Tyr Glu Asp Glu Lys Lys Asn Glu Lys Pro Pro Lys Pro Ser
20 25 30
Leu His Ala Trp Pro Ser Ser Val Val Glu Ala Glu Ser Asn Val
35 40 45
Thr Leu Lys Cys Gln Ala His Ser Gln Asn Val Thr Phe Val Leu
50 55 60
Arg Lys Val Asn Asp Ser Gly Tyr Lys Gln Glu Gln Ser Ser Ala
65 70 75
Glu Asn Glu Ala Glu Phe Pro Phe Thr Asp Leu Lys Pro Lys Asp
80 85 90
Ala Gly Arg Tyr Phe Cys Ala Tyr Lys Thr Thr Ala Ser His Glu
95 100 105
Trp Ser Glu Ser Ser Glu His Leu Gln Leu Val Val Thr Asp Lys
110 115 120
His Asp Glu Leu Glu Ala Pro Ser Met Lys Thr Asp Thr Arg Thr
125 130 135
Ile Phe Val Ala Ile Phe Ser Cys Ile Ser Ile Leu Leu Leu Phe
140 145 150
Leu Ser Val Phe Ile Ile Tyr Arg Cys Ser Gln His Gly Ser Ser
155 160 165
Ser Glu Glu Ser Thr Lys Arg Thr Ser His Ser Lys Leu Pro Glu
170 175 180
Gln Glu Ala Ala Glu Ala Asp Leu Ser Asn Met Glu Arg Val Ser
185 190 195
Leu Ser Thr Ala Asp Pro Gln Gly Val Thr Tyr Ala Glu Leu Ser
200 205 210
Thr Ser Ala Leu Ser Glu Ala Ala Ser Asp Thr Thr Gln Glu Pro
215 220 225

Pro Gly Ser His Glu Tyr Ala Ala Leu Lys Val
 230 235

<210> 545
 <211> 1535
 <212> DNA
 <213> Homo Sapien

<400> 545
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 gactgaaccg aaatgggtct cgggtctggag ccgcttcctc tgggtgacgc 200
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<210> 546

<211> 458

<212> PRT

<213> Homo Sapien

<400> 546

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Lys	Trp	Val	Ser	Val	Trp	Ser	Arg	Phe	Leu	Trp	Val	Thr	Leu	Leu
				20					25					30
Ser	Met	Val	Leu	Gly	Ser	Leu	Leu	Ala	Leu	Leu	Leu	Pro	Leu	Gly
				35					40					45
Ala	Val	Glu	Glu	Gln	Cys	Leu	Ala	Val	Leu	Lys	Gly	Leu	Tyr	Leu
				50					55					60
Leu	Arg	Ser	Lys	Pro	Asp	Arg	Ala	Gln	His	Ala	Ala	Thr	Lys	Cys
				65					70					75
Thr	Ser	Pro	Ser	Thr	Glu	Leu	Ser	Ile	Thr	Ser	Arg	Gly	Ala	Thr
				80					85					90
Leu	Leu	Val	Ala	Lys	Thr	Lys	Ala	Ser	Pro	Ala	Gly	Lys	Leu	Glu
				95					100					105
Ala	Arg	Ala	Ala	Leu	Asn	Gln	Ala	Leu	Glu	Met	Lys	Arg	Gln	Gly
				110					115					120
Lys	Arg	Glu	Lys	Ala	Gln	Lys	Leu	Phe	Met	His	Ala	Leu	Lys	Met
				125					130					135
Asp	Pro	Asp	Phe	Val	Asp	Ala	Leu	Thr	Glu	Phe	Gly	Ile	Phe	Ser
				140					145					150
Glu	Glu	Asp	Lys	Asp	Ile	Ile	Gln	Ala	Asp	Tyr	Leu	Tyr	Thr	Arg
				155					160					165
Ala	Leu	Thr	Ile	Ser	Pro	Tyr	His	Glu	Lys	Ala	Leu	Val	Asn	Arg
				170					175					180
Asp	Arg	Thr	Leu	Pro	Leu	Val	Glu	Glu	Ile	Asp	Gln	Arg	Tyr	Phe
				185					190					195
Ser	Ile	Ile	Asp	Ser	Lys	Val	Lys	Lys	Val	Met	Ser	Ile	Pro	Lys

Gly Asn Ser Ala	Leu Arg Arg Val Met	Glu Glu Thr Tyr Tyr	His
215		220	225
His Ile Tyr His	Thr Val Ala Ile Glu	Gly Asn Thr Leu Thr	Leu
230		235	240
Ser Glu Ile Arg	His Ile Leu Glu Thr	Arg Tyr Ala Val Pro	Gly
245		250	255
Lys Ser Leu Glu	Glu Gln Asn Glu Val	Ile Gly Met His Ala	Ala
260		265	270
Met Lys Tyr Ile	Asn Thr Thr Leu Val	Ser Arg Ile Gly Ser	Val
275		280	285
Thr Ile Ser Asp	Val Leu Glu Ile His	Arg Arg Val Leu Gly	Tyr
290		295	300
Val Asp Pro Val	Glu Ala Gly Arg Phe	Arg Thr Thr Gln Val	Leu
305		310	315
Val Gly His His	Ile Pro Pro His Pro	Gln Asp Val Glu Lys	Gln
320		325	330
Met Gln Glu Phe	Val Gln Trp Leu Asn	Ser Glu Glu Ala Met	Asn
335		340	345
Leu His Pro Val	Glu Phe Ala Ala Leu	Ala His Tyr Lys Leu	Val
350		355	360
Tyr Ile His Pro	Phe Ile Asp Gly Asn	Gly Arg Thr Ser Arg	Leu
365		370	375
Leu Met Asn Leu	Ile Leu Met Gln Ala	Gly Tyr Pro Pro Ile	Thr
380		385	390
Ile Arg Lys Glu	Gln Arg Ser Asp Tyr	Tyr His Val Leu Glu	Ala
395		400	405
Ala Asn Glu Gly	Asp Val Arg Pro Phe	Ile Arg Phe Ile Ala	Lys
410		415	420
Cys Thr Glu Thr	Thr Leu Asp Thr Leu	Leu Phe Ala Thr Thr	Glu
425		430	435
Tyr Ser Val Ala	Leu Pro Glu Ala Gln	Pro Asn His Ser Gly	Phe
440		445	450
Lys Glu Thr Leu	Pro Val Lys Pro		
455			

<210> 547
 <211> 1863
 <212> DNA
 <213> Homo Sapien

<400> 547

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<210> 548

<211> 300

<212> PRT

<213> Homo Sapien

<400> 548

Met	Glu	Ile	Pro	Met	Gly	Thr	Gln	Gly	Cys	Phe	Ser	Lys	Ser	Leu	1	5	10	15
Leu	Leu	Ser	Ala	Ser	Ile	Leu	Val	Leu	Trp	Met	Leu	Gln	Gly	Ser	20	25	30	
Gln	Ala	Ala	Leu	Tyr	Ile	Gln	Lys	Ile	Pro	Glu	Gln	Pro	Gln	Lys	35	40	45	
Asn	Gln	Asp	Leu	Leu	Leu	Ser	Val	Gln	Gly	Val	Pro	Asp	Thr	Phe	50	55	60	
Gln	Asp	Phe	Asn	Trp	Tyr	Leu	Gly	Glu	Glu	Thr	Tyr	Gly	Gly	Thr	65	70	75	
Arg	Leu	Phe	Thr	Tyr	Ile	Pro	Gly	Ile	Gln	Arg	Pro	Gln	Arg	Asp	80	85	90	
Gly	Ser	Ala	Met	Gly	Gln	Arg	Asp	Ile	Val	Gly	Phe	Pro	Asn	Gly	95	100	105	
Ser	Met	Leu	Leu	Arg	Arg	Ala	Gln	Pro	Thr	Asp	Ser	Gly	Thr	Tyr	110	115	120	
Gln	Val	Ala	Ile	Thr	Ile	Asn	Ser	Glu	Trp	Thr	Met	Lys	Ala	Lys	125	130	135	
Thr	Glu	Val	Gln	Val	Ala	Glu	Lys	Asn	Lys	Glu	Leu	Pro	Ser	Thr	140	145	150	
His	Leu	Pro	Thr	Asn	Ala	Gly	Ile	Leu	Ala	Ala	Thr	Ile	Ile	Gly	155	160	165	
Ser	Leu	Ala	Ala	Gly	Ala	Leu	Leu	Ile	Ser	Cys	Ile	Ala	Tyr	Leu				

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<210> 550
 <211> 104
 <212> PRT
 <213> Homo Sapien

<400> 550
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 Gly Val Leu Leu Ala Pro Asp Gly Arg Glu Met Pro Gly Val Leu
 20 25 30
 Leu His Thr Leu Trp Asp Thr Ala Gln Tyr Thr Trp Pro Val Ser
 35 40 45
 Pro Thr Ala Arg Ala Gly Pro Gly Gln Ala Trp Ser Leu Arg Cys
 50 55 60
 Val Leu Val Gly Ile Leu His Ser Asp Arg Arg Cys Ala Leu Pro
 65 70 75
 Thr Phe Pro His Ser Ser Phe Ala Cys Gly Ala His Pro Phe Ala
 80 85 90
 Glu Ser Ser Phe Pro Cys Gly Leu Trp Pro Ala Glu Val Lys
 95 100

<210> 551
 <211> 3141
 <212> DNA
 <213> Homo Sapien

<400> 551
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 cctgtccctc agccatacca acatcctgat gctagactct gccagcctcg 500

ccggcctgca	tgcacctgcg	ttcctattca	tggacggcaa	ctgttattac	550
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cctgggcagc	ctcaccacc	tgtcactcaa	gtacaacaac	ctcactgtgg	650
tgccccgcaa	cctgccttcc	agcctggagt	atctgctgtt	gtcctacaac	700
cgcacgtca	aactggcgcc	tgaggacctg	gccaatctga	ccgccctgcg	750
tgtgctcgat	gtgggcggaa	attgccggcg	ctgcgaccac	gtccccaacc	800
cctgcatgga	gtgccctegt	cacttcccc	agctacatcc	cgataccttc	850
agccacctga	gccgtcttga	aggcctgggtg	ttgaaggaca	gttctctctc	900
ctggctgaat	gccagttggt	tccgtgggct	gggaaacctc	cgagtgtctg	950
acctgagtga	gaacttcctc	tacaaatgca	tcactaaaac	caaggccctc	1000
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gaggggtgtcc	tttgccacc	tgtctctggc	cccttccttc	gggagcctgg	1100
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agcctggccc	acaacaacat	ccacagccaa	gtgtcccagc	agctctgcag	1800
tacgtcgctg	cgggccttgg	acttcagcgg	caatgcactg	ggccatatgt	1850
gggccgaggg	agacctctat	ctgcacttct	tccaaggcct	gagcggtttg	1900
atctggctgg	acttgctcca	gaaccgcctg	cacacctctc	tgccccaaac	1950

	20		25		30
Ala Phe Leu Pro Cys Glu Leu Gln Pro His Gly Leu Val Asn Cys	35		40		45
Asn Trp Leu Phe Leu Lys Ser Val Pro His Phe Ser Met Ala Ala	50		55		60
Pro Arg Gly Asn Val Thr Ser Leu Ser Leu Ser Ser Asn Arg Ile	65		70		75
His His Leu His Asp Ser Asp Phe Ala His Leu Pro Ser Leu Arg	80		85		90
His Leu Asn Leu Lys Trp Asn Cys Pro Pro Val Gly Leu Ser Pro	95		100		105
Met His Phe Pro Cys His Met Thr Ile Glu Pro Ser Thr Phe Leu	110		115		120
Ala Val Pro Thr Leu Glu Glu Leu Asn Leu Ser Tyr Asn Asn Ile	125		130		135
Met Thr Val Pro Ala Leu Pro Lys Ser Leu Ile Ser Leu Ser Leu	140		145		150
Ser His Thr Asn Ile Leu Met Leu Asp Ser Ala Ser Leu Ala Gly	155		160		165
Leu His Ala Leu Arg Phe Leu Phe Met Asp Gly Asn Cys Tyr Tyr	170		175		180
Lys Asn Pro Cys Arg Gln Ala Leu Glu Val Ala Pro Gly Ala Leu	185		190		195
Leu Gly Leu Gly Ser Leu Thr His Leu Ser Leu Lys Tyr Asn Asn	200		205		210
Leu Thr Val Val Pro Arg Asn Leu Pro Ser Ser Leu Glu Tyr Leu	215		220		225
Leu Leu Ser Tyr Asn Arg Ile Val Lys Leu Ala Pro Glu Asp Leu	230		235		240
Ala Asn Leu Thr Ala Leu Arg Val Leu Asp Val Gly Gly Asn Cys	245		250		255
Arg Arg Cys Asp His Ala Pro Asn Pro Cys Met Glu Cys Pro Arg	260		265		270
His Phe Pro Gln Leu His Pro Asp Thr Phe Ser His Leu Ser Arg	275		280		285
Leu Glu Gly Leu Val Leu Lys Asp Ser Ser Leu Ser Trp Leu Asn	290		295		300
Ala Ser Trp Phe Arg Gly Leu Gly Asn Leu Arg Val Leu Asp Leu	305		310		315

	605		610		615
Glu Gly Asp Leu Tyr	Leu His Phe Phe	Gln Gly Leu Ser Gly	Leu		
	620		625		630
Ile Trp Leu Asp	Leu Ser Gln Asn Arg	Leu His Thr Leu Leu	Pro		
	635		640		645
Gln Thr Leu Arg	Asn Leu Pro Lys Ser	Leu Gln Val Leu Arg	Leu		
	650		655		660
Arg Asp Asn Tyr	Leu Ala Phe Phe Lys	Trp Trp Ser Leu His	Phe		
	665		670		675
Leu Pro Lys Leu	Glu Val Leu Asp Leu	Ala Gly Asn Gln Leu	Lys		
	680		685		690
Ala Leu Thr Asn	Gly Ser Leu Pro Ala	Gly Thr Arg Leu Arg	Arg		
	695		700		705
Leu Asp Val Ser	Cys Asn Ser Ile Ser	Phe Val Ala Pro Gly	Phe		
	710		715		720
Phe Ser Lys Ala	Lys Glu Leu Arg Glu	Leu Asn Leu Ser Ala	Asn		
	725		730		735
Ala Leu Lys Thr	Val Asp His Ser Trp	Phe Gly Pro Leu Ala	Ser		
	740		745		750
Ala Leu Gln Ile	Leu Asp Val Ser Ala	Asn Pro Leu His Cys	Ala		
	755		760		765
Cys Gly Ala Ala	Phe Met Asp Phe Leu	Leu Glu Val Gln Ala	Ala		
	770		775		780
Val Pro Gly Leu	Pro Ser Arg Val Lys	Cys Gly Ser Pro Gly	Gln		
	785		790		795
Leu Gln Gly Leu	Ser Ile Phe Ala Gln	Asp Leu Arg Leu Cys	Leu		
	800		805		810
Asp Glu Ala Leu	Ser Trp Asp Cys Phe	Ala Leu Ser Leu Leu	Ala		
	815		820		825
Val Ala Leu Gly	Leu Gly Val Pro Met	Leu His His Leu Cys	Gly		
	830		835		840
Trp Asp Leu Trp	Tyr Cys Phe His Leu	Cys Leu Ala Trp Leu	Pro		
	845		850		855
Trp Arg Gly Arg	Gln Ser Gly Arg Asp	Glu Asp Ala Leu Pro	Tyr		
	860		865		870
Asp Ala Phe Val	Val Phe Asp Lys Thr	Gln Ser Ala Val Ala	Asp		
	875		880		885
Trp Val Tyr Asn	Glu Leu Arg Gly Gln	Leu Glu Glu Cys Arg	Gly		
	890		895		900

Arg Trp Ala Leu Arg Leu Cys Leu Glu Glu Arg Asp Trp Leu Pro
905 910 915

Gly Lys Thr Leu Phe Glu Asn Leu Trp Ala Ser Val Tyr Gly Ser
920 925 930

Arg Lys Thr Leu Phe Val Leu Ala His Thr Asp Arg Val Ser Gly
935 940 945

Leu Leu Arg Ala Ser Phe Leu Leu Ala Gln Gln Arg Leu Leu Glu
950 955 960

Asp Arg Lys Asp Val Val Val Leu Val Ile Leu Ser Pro Asp Gly
965 970 975

Arg Arg Ser Arg Tyr Val Arg Leu Arg Gln Arg Leu Cys Arg Gln
980 985 990

Ser Val Leu Leu Trp Pro His Gln Pro Ser Gly Gln Arg Ser Phe
995 1000 1005

Trp Ala Gln Leu Gly Met Ala Leu Thr Arg Asp Asn His His Phe
1010 1015 1020

Tyr Asn Arg Asn Phe Cys Gln Gly Pro Thr Ala Glu
1025 1030

<210> 553
<211> 1234
<212> DNA
<213> Homo Sapien

<400> 553
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gtgtgtgtcc tctgttaaga gtgctactcg cccgggggtg atctgtgcat 100
gccactcctg ggtcagacgg tgaggtcggc gtctgcgagg acgcggcggt 150
ggagtagaag ggcagccgga gacaggcccg gcgccccttc cgaggctaga 200
cggccccagc ttcgcgggga tcatggcatt gctgggtggac cgagtgcggg 250
gccactggcg aatcgccgcc gggtcctgt tcaacctgct ggtgtccatc 300
tgcatttgtt tcctcaacaa atggatttat gtgtaccacg gcttccocaa 350
catgagcctg acctggtgc acttcgtggt cacctggctg ggcttgata 400
tctgccagaa gctggacatc ttgccccca aaagtctgcc gccctocagg 450
ctctctctcc tggccctcag cttctgtggc tttgtggtct tcaactaacct 500
ttctctgcag aacaacacca taggcaccta tcagctggcc aaggccatga 550
ccacgccggt gatcatagcc atccagacct tctgctacca gaaaaccttc 600
tccaccagaa tccagctcac gctgattcct ataactttag gtgtaatcct 650

aaattcttat tacgatgtga agtttaattt ccttggaatg gtgtttgctg 700
ctcttggtgt tttagttaca tccctttatc aagtgtgggt aggagccaaa 750
cagcatgaat tacaagtga ctcaatgcag ctgctgtact accaggctcc 800
gatgtcatct gccatgttgc tggttgctgt gcccttcttt gagccagtgt 850
ttggagaagg aggaatattt ggtccctggt cagtttctgc tttgcttatg 900
gtgctgctat ctggagtaat agctttcatg gtgaacttat caatttattg 950
gatcattggg aacacttcac ctgtcaccta taacatgttc ggacacttca 1000
agttctgcat tactttattc ggaggatatg ttttatttaa ggatccactg 1050
tccattaatc aggcccttgg cattttatgt acattatttg gcattctcgc 1100
ctatacccac tttaaagtca gtgaacagga aggaagtagg agtaaactgg 1150
cacaacgtcc ttaattgggt ttttgtggag aaaagaatgt tgtccaaga 1200
agataaaaaa tattgttaag tgtgcaagtt atta 1234

<210> 554
<211> 313
<212> PRT
<213> Homo Sapien

<400> 554
Met Ala Leu Leu Val Asp Arg Val Arg Gly His Trp Arg Ile Ala
1 5 10 15
Ala Gly Leu Leu Phe Asn Leu Leu Val Ser Ile Cys Ile Val Phe
20 25 30
Leu Asn Lys Trp Ile Tyr Val Tyr His Gly Phe Pro Asn Met Ser
35 40 45
Leu Thr Leu Val His Phe Val Val Thr Trp Leu Gly Leu Tyr Ile
50 55 60
Cys Gln Lys Leu Asp Ile Phe Ala Pro Lys Ser Leu Pro Pro Ser
65 70 75
Arg Leu Leu Leu Leu Ala Leu Ser Phe Cys Gly Phe Val Val Phe
80 85 90
Thr Asn Leu Ser Leu Gln Asn Asn Thr Ile Gly Thr Tyr Gln Leu
95 100 105
Ala Lys Ala Met Thr Thr Pro Val Ile Ile Ala Ile Gln Thr Phe
110 115 120
Cys Tyr Gln Lys Thr Phe Ser Thr Arg Ile Gln Leu Thr Leu Ile
125 130 135
Pro Ile Thr Leu Gly Val Ile Leu Asn Ser Tyr Tyr Asp Val Lys

140	145	150
Phe Asn Phe Leu Gly Met Val Phe Ala	Ala Leu Gly Val Leu Val	
155	160	165
Thr Ser Leu Tyr Gln Val Trp Val Gly	Ala Lys Gln His Glu Leu	
170	175	180
Gln Val Asn Ser Met Gln Leu Leu Tyr	Tyr Gln Ala Pro Met Ser	
185	190	195
Ser Ala Met Leu Leu Val Ala Val Pro	Phe Phe Glu Pro Val Phe	
200	205	210
Gly Glu Gly Gly Ile Phe Gly Pro Trp	Ser Val Ser Ala Leu Leu	
215	220	225
Met Val Leu Leu Ser Gly Val Ile Ala	Phe Met Val Asn Leu Ser	
230	235	240
Ile Tyr Trp Ile Ile Gly Asn Thr Ser	Pro Val Thr Tyr Asn Met	
245	250	255
Phe Gly His Phe Lys Phe Cys Ile Thr	Leu Phe Gly Gly Tyr Val	
260	265	270
Leu Phe Lys Asp Pro Leu Ser Ile Asn	Gln Ala Leu Gly Ile Leu	
275	280	285
Cys Thr Leu Phe Gly Ile Leu Ala Tyr	Thr His Phe Lys Leu Ser	
290	295	300
Glu Gln Glu Gly Ser Arg Ser Lys Leu	Ala Gln Arg Pro	
305	310	

<210> 555
 <211> 1773
 <212> DNA
 <213> Homo Sapien

<400> 555
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 tggcttattg tgctgcaga gtctagtgt tctttgccag ctgtgctgac 150
 tcagcactcc atgcctgttt tctggaacca gtccttgag ctgggccatg 200
 ttttgattga cagtgtggag ctagcccagc aagtactcta catgcaaccc 250
 cccaccagg cactacctct gctcctctc catggcctcc tgctacaccg 300
 gcagctctat ggaacaaggc tgcaggcaca cagggggcgc tggagtcaag 350
 tgactctaac ccaggttctt cagacccaag accagctgtg ggcaagtctt 400
 agcaatcccc gtgctgccat gcaagagctg gctgcttcag ttttctacgg 450

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 aagcctgcct gagccccagt agtgggagct ggggccagcc acacacacct 550
 cagtctttgc tggccacgct catgcccctc ccagctaagg gagctggatg 600
 caatggcaga gtgcaaggcc cagatgcacc tactgccctc accacctgaa 650
 ccccggtctc gcggactgag tgagggcccc caagcctggc tgttgcgacg 700
 ccagagtcgc gctctcttga gtgcgctgca gcggagtcca cccgtgtggg 750
 ttcttgagtc tcgaagaggc gccagcttg cggaaggcg actgcggcaa 800
 cgctagtgc aagtcaaccg gaggctggag tcactgcagg atctgctgac 850
 ccacgtgatt cgccaagacg agtccgacgc cccgtggcca gtgctggggc 900
 caaatgcacg gcggcctctg gagggcgtct tagagaccga ggctctagaa 950
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 gcagctgaag ggcgaccccc cgtgcccctc ccgcgcgtgt gctgcgggtg 1050
 cccacgctct ctggactggc cgctaccct tgccttggcg acctcatgcg 1100
 ccggccggtc cgcagccgcc ctggcaactg ctgcgacagt tgtcgcgccg 1150
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 atgtaccaga gcgctcttc cactgtcag cctttcgcca cccgcgcgcg 1250
 ctgctgctgg cattgcgtgg ggaagctgcc ctggaccaga atgtgcccag 1300
 ctgcaatttc cctggtagcc gaggctcgtt ctccagtcag ctccagtata 1350
 aacgtctgga gatgaacagc aaccctctgc acttcagggt ggagaatggt 1400
 ccaaattccca cggttccaga gagagggctg ctgctgatcg ggctacaggt 1450
 cctacatgcg gagggggacc caatagctgg agccttgag gacagtcctt 1500
 ccagccaacc cagccctctg cctcccgcca gcatcagcac acaggccccg 1550
 ggcaccagtg acctgccagc cccagccgac ctgactgtgt actcgtgtcc 1600
 tgtgtacatg ggagggcccc ttggcaccgc taagctgcag agcaggaaca 1650
 tcgtgatgca tctgccttta cccaccaagc tcacccccaa cacctgtgtc 1700
 caaaggaggg tccatgtgtg cagcccaccc ctgtcttgag cccgtctacc 1750
 aaaataaagt tgtagtgatt cca 1773

<210> 556

<211> 162

<212> PRT

<213> Homo Sapien

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 aatgccgttc acctcgcagt gaggggggat gaaggataag cccattgggtg 600
 ggcagaatgt cttctaatta catgggttatt ttcagaattt atttgttgag 650
 gaagagggtt gagggagttag gttcgaccat tcgtgagtct gtgttcata 700
 ctccactgag tgtgggcact agctcacagc ctgcggtga gactgaacat 750
 ttcattgagct catgttgctt ttgaccacca tttcttaagg agagccagct 800
 gattgctgtc aggataagag catctcttca gccaggaggg aggcctgttc 850
 cctcctgagt tagactttgc atgaagctcg aaagtattcc ctttgaacc 900
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 ggaacattta atcaggagat gctctcaatg actaatttgt ctaagtctta 1000
 ggaaggaggt tgaggaaagc tggatttaga caagttcaat ttagggagtt 1050
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 aaatgtatct caattgtgca gaagtgagct gtccaaaagt ataagactaa 1150
 gtgataaact gtcttccac cgtgggagtt gttaatgaga aagaaagtgt 1200
 actctgaaaa aacaaggggg 1220

<210> 558
 <211> 159
 <212> PRT
 <213> Homo Sapien

<400> 558
 Met Ala Val Leu Leu Lys Leu Gly Val Leu Cys Ser Gly Gln Gly
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 Ala Arg Ala Leu Leu Leu Arg Ser Arg Val Val Arg Pro Ala Tyr
 20 25 30
 Val Ser Ala Phe Leu Gln Asp Gln Pro Thr Gln Gly Arg Cys Gly
 35 40 45
 Thr Gln His Ile His Leu Ser Pro Ser His His Ser Gly Ser Lys
 50 55 60
 Ala Ala Ser Leu His Trp Thr Ser Glu Arg Val Val Ser Val Leu
 65 70 75
 Leu Leu Gly Leu Ile Pro Ala Gly Tyr Leu Asn Pro Cys Ser Val
 80 85 90
 Val Asp Tyr Ser Leu Ala Ala Ala Leu Thr Leu His Ser His Trp
 95 100 105

Gly Leu Gly Gln Val Val Thr Asp Tyr Val His Gly Asp Thr Leu
110 115 120

Pro Lys Ala Ala Arg Ala Gly Leu Leu Ala Leu Ser Ala Leu Thr
125 130 135

Phe Ala Gly Leu Cys Tyr Phe Asn Tyr His Asp Val Gly Ile Cys
140 145 150

Arg Ala Val Ala Met Leu Trp Lys Leu
155

<210> 559
<211> 2473
<212> DNA
<213> Homo Sapien

<400> 559
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atgcgccccg cgcagccgcc tgcgcctgcg ggagccggct gcccttgaga 100
tggagtgtgt gctcttttgg ctctgcctgg gttttcactt cctgaccgtg 150
ggctggagga acagaagcgg aacagccaca gcagcctccc aaggagtctg 200
caagttggtg ggtggagccg ctgactgccg agggcagagc ctcgcttcgg 250
tgcccagcag cctcccgccc cacgcccgga tgctcaccct ggatgccaac 300
cctctcaaga ccctgtggaa tcactccctc cagccttacc ctctcctgga 350
gagcctcagc ctgcacagct gccacctgga gcgcacacgc cgcgggcgct 400
tccaggagca aggtcacctg cgcagcctgg tccctggggga caactgcctc 450
tcagagaact acgaagagac ggcagccgcc ctccacgccc tgccgggcct 500
gcggagggtg gacttgtcag gaaacgccct gacggaggac atggcagcgc 550
tcattgtcca gaacctctcc tcgctgcggt ccgtgtccct ggccggggaac 600
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ggagctggat ctgcagagga actacatctt cgagatcgag ggccggcgctt 700
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ccctgcacgc tggacttcgg gctcacgcgg ctgcgggtcc tcaacgtcag 800
ctacaacgtc ctggagtggg tctcgcgcac cgggggagag gctgccttcg 850
agctggagac gctggacctg tctcacaacc agctgctgtt cttcccgtg 900
ctgccccagt acagcaagtt gcggaccctc ctgctgcgcg acaacaacat 950
gggcttctac cgggacctgt acaaacctc gtcgccgagg gagatggtgg 1000

ttaaaaaaaa aaaaaaaaaa aaa 2473

<210> 560

<211> 692

<212> PRT

<213> Homo Sapien

<400> 560

Met Glu Leu Leu Pro Leu Trp Leu Cys Leu Gly Phe His Phe Leu
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Thr Val Gly Trp Arg Asn Arg Ser Gly Thr Ala Thr Ala Ala Ser
20 25 30

Gln Gly Val Cys Lys Leu Val Gly Gly Ala Ala Asp Cys Arg Gly
35 40 45

Gln Ser Leu Ala Ser Val Pro Ser Ser Leu Pro Pro His Ala Arg
50 55 60

Met Leu Thr Leu Asp Ala Asn Pro Leu Lys Thr Leu Trp Asn His
65 70 75

Ser Leu Gln Pro Tyr Pro Leu Leu Glu Ser Leu Ser Leu His Ser
80 85 90

Cys His Leu Glu Arg Ile Ser Arg Gly Ala Phe Gln Glu Gln Gly
95 100 105

His Leu Arg Ser Leu Val Leu Gly Asp Asn Cys Leu Ser Glu Asn
110 115 120

Tyr Glu Glu Thr Ala Ala Ala Leu His Ala Leu Pro Gly Leu Arg
125 130 135

Arg Leu Asp Leu Ser Gly Asn Ala Leu Thr Glu Asp Met Ala Ala
140 145 150

Leu Met Leu Gln Asn Leu Ser Ser Leu Arg Ser Val Ser Leu Ala
155 160 165

Gly Asn Thr Ile Met Arg Leu Asp Asp Ser Val Phe Glu Gly Leu
170 175 180

Glu Arg Leu Arg Glu Leu Asp Leu Gln Arg Asn Tyr Ile Phe Glu
185 190 195

Ile Glu Gly Gly Ala Phe Asp Gly Leu Ala Glu Leu Arg His Leu
200 205 210

Asn Leu Ala Phe Asn Asn Leu Pro Cys Ile Val Asp Phe Gly Leu
215 220 225

Thr Arg Leu Arg Val Leu Asn Val Ser Tyr Asn Val Leu Glu Trp
230 235 240

Phe Leu Ala Thr Gly Gly Glu Ala Ala Phe Glu Leu Glu Thr Leu
245 250 255

Asp	Leu	Ser	His	Asn	Gln	Leu	Leu	Phe	Phe	Pro	Leu	Leu	Pro	Gln	
				260					265					270	
Tyr	Ser	Lys	Leu	Arg	Thr	Leu	Leu	Leu	Arg	Asp	Asn	Asn	Met	Gly	
				275					280					285	
Phe	Tyr	Arg	Asp	Leu	Tyr	Asn	Thr	Ser	Ser	Pro	Arg	Glu	Met	Val	
				290					295					300	
Ala	Gln	Phe	Leu	Leu	Val	Asp	Gly	Asn	Val	Thr	Asn	Ile	Thr	Thr	
				305					310					315	
Val	Ser	Leu	Trp	Glu	Glu	Phe	Ser	Ser	Ser	Asp	Leu	Ala	Asp	Leu	
				320					325					330	
Arg	Phe	Leu	Asp	Met	Ser	Gln	Asn	Gln	Phe	Gln	Tyr	Leu	Pro	Asp	
				335					340					345	
Gly	Phe	Leu	Arg	Lys	Met	Pro	Ser	Leu	Ser	His	Leu	Asn	Leu	His	
				350					355					360	
Gln	Asn	Cys	Leu	Met	Thr	Leu	His	Ile	Arg	Glu	His	Glu	Pro	Pro	
				365					370					375	
Gly	Ala	Leu	Thr	Glu	Leu	Asp	Leu	Ser	His	Asn	Gln	Leu	Ser	Glu	
				380					385					390	
Leu	His	Leu	Ala	Pro	Gly	Leu	Ala	Ser	Cys	Leu	Gly	Ser	Leu	Arg	
				395					400					405	
Leu	Phe	Asn	Leu	Ser	Ser	Asn	Gln	Leu	Leu	Gly	Val	Pro	Pro	Gly	
				410					415					420	
Leu	Phe	Ala	Asn	Ala	Arg	Asn	Ile	Thr	Thr	Leu	Asp	Met	Ser	His	
				425					430					435	
Asn	Gln	Ile	Ser	Leu	Cys	Pro	Leu	Pro	Ala	Ala	Ser	Asp	Arg	Val	
				440					445					450	
Gly	Pro	Pro	Ser	Cys	Val	Asp	Phe	Arg	Asn	Met	Ala	Ser	Leu	Arg	
				455					460					465	
Ser	Leu	Ser	Leu	Glu	Gly	Cys	Gly	Leu	Gly	Ala	Leu	Pro	Asp	Cys	
				470					475					480	
Pro	Phe	Gln	Gly	Thr	Ser	Leu	Thr	Tyr	Leu	Asp	Leu	Ser	Ser	Asn	
				485					490					495	
Trp	Gly	Val	Leu	Asn	Gly	Ser	Leu	Ala	Pro	Leu	Gln	Asp	Val	Ala	
				500					505					510	
Pro	Met	Leu	Gln	Val	Leu	Ser	Leu	Arg	Asn	Met	Gly	Leu	His	Ser	
				515					520					525	
Ser	Phe	Met	Ala	Leu	Asp	Phe	Ser	Gly	Phe	Gly	Asn	Leu	Arg	Asp	
				530					535					540	
Leu	Asp	Leu	Ser	Gly	Asn	Cys	Leu	Thr	Thr	Phe	Pro	Arg	Phe	Gly	

205530.01

545	550	555
Gly Ser Leu Ala Leu Glu Thr Leu Asp	Leu Arg Arg Asn Ser Leu	
560	565	570
Thr Ala Leu Pro Gln Lys Ala Val Ser	Glu Gln Leu Ser Arg Gly	
575	580	585
Leu Arg Thr Ile Tyr Leu Ser Gln Asn	Pro Tyr Asp Cys Cys Gly	
590	595	600
Val Asp Gly Trp Gly Ala Leu Gln His	Gly Gln Thr Val Ala Asp	
605	610	615
Trp Ala Met Val Thr Cys Asn Leu Ser	Ser Lys Ile Ile Arg Val	
620	625	630
Thr Glu Leu Pro Gly Gly Val Pro Arg	Asp Cys Lys Trp Glu Arg	
635	640	645
Leu Asp Leu Gly Leu Leu Tyr Leu Val	Leu Ile Leu Pro Ser Cys	
650	655	660
Leu Thr Leu Leu Val Ala Cys Thr Val	Ile Val Leu Thr Phe Lys	
665	670	675
Lys Pro Leu Leu Gln Val Ile Lys Ser	Arg Cys His Trp Ser Ser	
680	685	690
Val Tyr		

<210> 561
<211> 1060
<212> DNA
<213> Homo Sapien

<400> 561
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gtggccacaa catggctgcg gcgccggggc tgctcttctg gctgttcgtg 100
ctggggggcg tctggtgggt cccggggccag tcggatctca gccacggacg 150
gcgttttctg gacctcaaag tgtgcgggga cgaagagtgc agcatgttaa 200
tgtaccgtgg gaaagctctt gaagacttca cgggccctga ttgtcgtttt 250
gtgaatttta aaaaagggtga cgatgtatat gtctactaca aactggcagg 300
gggatccctt gaactttggg ctggaagtgt tgaacacagt tttggatatt 350
ttccaaaaga tttgatcaag gtacttcata aatacacgga agaagagcta 400
catattccag cagatgagac agactttgtc tgctttgaag gaggaagaga 450
tgattttaat agttataatg tagaagagct ttaggatct ttggaactgg 500

aggactctgt acctgaagag tcgaagaaag ctgaagaagt ttctcagcac 550
 agagagaaat ctctgagga gtctcggggg cgtgaacttg accctgtgcc 600
 tgagcccgag gcattcagag ctgattcaga ggatggagaa ggtgctttct 650
 cagagagcac cgaggggctg cagggacagc cctcagctca ggagagccac 700
 cctcacacca gcggtcctgc ggctaacgct cagggagtgc agtcttcgtt 750
 ggacactttt gaagaaattc tgcacgataa attgaaagtg ccggaagcg 800
 aaagcagaac tggcaatagt tctcctgcct cggaggagcg ggagaagaca 850
 gatgcttaca aagtcttgaa aacagaaatg agtcagagag gaagtggaca 900
 gtgcgttatt cattacagca aaggatttcg ttggcatcaa aatctaagtt 950
 tgttttacia agattgtttt tagtactaag ctgccttggc agtttgcatt 1000
 tttgagccaa acaaaaatat attattttcc cttctaagta aaaaaaaaaa 1050
 aaaaaaaaaa 1060

<210> 562

<211> 303

<212> PRT

<213> Homo Sapien

<400> 562

Met	Ala	Ala	Ala	Pro	Gly	Leu	Leu	Phe	Trp	Leu	Phe	Val	Leu	Gly	1	5	10	15
Ala	Leu	Trp	Trp	Val	Pro	Gly	Gln	Ser	Asp	Leu	Ser	His	Gly	Arg	20	25	30	
Arg	Phe	Ser	Asp	Leu	Lys	Val	Cys	Gly	Asp	Glu	Glu	Cys	Ser	Met	35	40	45	
Leu	Met	Tyr	Arg	Gly	Lys	Ala	Leu	Glu	Asp	Phe	Thr	Gly	Pro	Asp	50	55	60	
Cys	Arg	Phe	Val	Asn	Phe	Lys	Lys	Gly	Asp	Asp	Val	Tyr	Val	Tyr	65	70	75	
Tyr	Lys	Leu	Ala	Gly	Gly	Ser	Leu	Glu	Leu	Trp	Ala	Gly	Ser	Val	80	85	90	
Glu	His	Ser	Phe	Gly	Tyr	Phe	Pro	Lys	Asp	Leu	Ile	Lys	Val	Leu	95	100	105	
His	Lys	Tyr	Thr	Glu	Glu	Glu	Leu	His	Ile	Pro	Ala	Asp	Glu	Thr	110	115	120	
Asp	Phe	Val	Cys	Phe	Glu	Gly	Gly	Arg	Asp	Asp	Phe	Asn	Ser	Tyr	125	130	135	
Asn	Val	Glu	Glu	Leu	Leu	Gly	Ser	Leu	Glu	Leu	Glu	Asp	Ser	Val				

140	145	150
Pro Glu Glu Ser Lys Lys Ala Glu Glu Val Ser Gln His Arg Glu		
155	160	165
Lys Ser Pro Glu Glu Ser Arg Gly Arg Glu Leu Asp Pro Val Pro		
170	175	180
Glu Pro Glu Ala Phe Arg Ala Asp Ser Glu Asp Gly Glu Gly Ala		
185	190	195
Phe Ser Glu Ser Thr Glu Gly Leu Gln Gly Gln Pro Ser Ala Gln		
200	205	210
Glu Ser His Pro His Thr Ser Gly Pro Ala Ala Asn Ala Gln Gly		
215	220	225
Val Gln Ser Ser Leu Asp Thr Phe Glu Glu Ile Leu His Asp Lys		
230	235	240
Leu Lys Val Pro Gly Ser Glu Ser Arg Thr Gly Asn Ser Ser Pro		
245	250	255
Ala Ser Val Glu Arg Glu Lys Thr Asp Ala Tyr Lys Val Leu Lys		
260	265	270
Thr Glu Met Ser Gln Arg Gly Ser Gly Gln Cys Val Ile His Tyr		
275	280	285
Ser Lys Gly Phe Arg Trp His Gln Asn Leu Ser Leu Phe Tyr Lys		
290	295	300
Asp Cys Phe		

<210> 563
 <211> 824
 <212> DNA
 <213> Homo Sapien

<400> 563
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 tgacttttcc tcgtgtgacc catcttttca aattccctta cctgaggaag 100
 gagcccgatt acaaggatat ttacctgctc ctaccctgat ctagggacga 150
 ggatgggaag accgcctgtg gccatgagcc ctccccggtg ctctgggggc 200
 taaggctggg gctgcagcca tggggctggg tcagccccag gcctggttgc 250
 tgggtctgcc cacagctgtg gtctatggct ccctggctct cttcaccacc 300
 atcctgcaca atgtcttcct gctctactat gtggacacct ttgtctcagt 350
 gtacaagatc aacaaaatgg cttcttgggt cggagagaca gtgtttctcc 400
 tctggaacag cctcaatgac cctctcttcg gttggctcag tgaccggcag 450

ttctctcagct cccagccccg cctgtgtgga gaggagctgc ttgtgggcag 500
 tgaggaggcg gacagcatca ccttggggcg gtatctccgg cagctggcac 550
 gccatcgga cttctgtggg ttctgtgagca tggacctggt gcaggtgcag 600
 tggctcacgc ctgtaatccc agcacttcgg gacgccaagg tggaaagacc 650
 gcttgagccc aggagttcga ggctgcaatg agttatgatt gcaccactgc 700
 actccagcct gggcggcaga gaaaggctcc atctctaaaa aaagaagagc 750
 taagtgtgtg acctaaaaca tgcagtatat aaactggctg aacttagaaa 800
 taaactgttt tcatgttatg aaaa 824

<210> 564
 <211> 153
 <212> PRT
 <213> Homo Sapien

<400> 564
 Met Gly Leu Gly Gln Pro Gln Ala Trp Leu Leu Gly Leu Pro Thr
 1 5 10 15
 Ala Val Val Tyr Gly Ser Leu Ala Leu Phe Thr Thr Ile Leu His
 20 25 30
 Asn Val Phe Leu Leu Tyr Tyr Val Asp Thr Phe Val Ser Val Tyr
 35 40 45
 Lys Ile Asn Lys Met Ala Phe Trp Val Gly Glu Thr Val Phe Leu
 50 55 60
 Leu Trp Asn Ser Leu Asn Asp Pro Leu Phe Gly Trp Leu Ser Asp
 65 70 75
 Arg Gln Phe Leu Ser Ser Gln Pro Arg Leu Cys Gly Glu Glu Leu
 80 85 90
 Leu Val Gly Ser Glu Glu Ala Asp Ser Ile Thr Leu Gly Arg Tyr
 95 100 105
 Leu Arg Gln Leu Ala Arg His Arg Asn Phe Leu Trp Phe Val Ser
 110 115 120
 Met Asp Leu Val Gln Val Gln Trp Leu Thr Pro Val Ile Pro Ala
 125 130 135
 Leu Arg Asp Ala Lys Val Glu Arg Pro Leu Glu Pro Arg Ser Ser
 140 145 150
 Arg Leu Gln

<210> 565
 <211> 320
 <212> DNA

<213> Homo Sapien

<400> 565

cggcagcaggt aaaatggaga taatatcacc atgcactcag ccctagccac 50
tgcattgctg ttactgatac cattactgct gctacgtcgt ttttttgatg 100
gctcagccct tagggaaggg ggatcaaggg agaagcccg accttcccgc 150
aggaggtggg ctgggcacag ccctgaacca tggaggtcac ccaccctgag 200
gtcgggacct gggttccctt cctatccact ggggggtccca gcctttgtct 250
tcattctctcc aggtcccagc ccttcacagt gggcacttcc ctgcctgtga 300
cggaggcccc agccattctcc 320

<210> 566

<211> 89

<212> PRT

<213> Homo Sapien

<400> 566

Met	His	Ser	Ala	Leu	Ala	Thr	Ala	Leu	Leu	Leu	Leu	Ile	Pro	Leu	
1				5					10					15	
Leu	Leu	Leu	Arg	Arg	Phe	Phe	Asp	Gly	Ser	Ala	Leu	Arg	Glu	Gly	
			20						25					30	
Gly	Ser	Arg	Glu	Lys	Pro	Gly	Pro	Ser	Arg	Arg	Arg	Trp	Ala	Gly	
				35					40					45	
His	Ser	Pro	Glu	Pro	Trp	Arg	Ser	Pro	Thr	Leu	Arg	Ser	Gly	Pro	
				50					55					60	
Gly	Phe	Pro	Ser	Tyr	Pro	Leu	Gly	Val	Pro	Ala	Phe	Val	Phe	Ile	
				65					70					75	
Ser	Pro	Gly	Pro	Ser	Pro	Ser	Gln	Trp	Ala	Leu	Pro	Cys	Leu		
				80					85						

<210> 567

<211> 695

<212> DNA

<213> Homo Sapien

<400> 567

agtctagcag gaaaggagag ggagctttcc ccgaagaccc tcttggacca 50
gccccagget cctgtgctgg ttgcacgcca gggcctgtac tgaccacctc 100
cacgtgccac tggggctgta aggaggaatg gcggccgtgg gcagcctgct 150
tggcctggca gcctcttcct ggctaggggg ccagaacgcc tctgaccaca 200
gcctgtggct cctgaggaag ccccgaggct catcctgccc cggcacgggt 250
caccagctct gccggctgag gcagagcacc gtgaaggcca ccggacctgc 300

actccgccgc ctgcacacat cctcctggcg agctgacagc agcagggcct 350
 cactcactcg tgtgcaccgc caggcttatg cactgactcta ccccgctgctg 400
 ctggtgaagc aggatggctc caccatccac atccgctaca gggagccacg 450
 gcgcattgctg gcgatgcccc tagatctgga caccctgtct cctgaggagc 500
 gccggggccag gctgcggaag cgtgaggctc agctccagtc gaggaaggag 550
 tacgagcagg agctcagtga tgacttgcat gtggagcgct accgacagtt 600
 ctggaccagg accaagaagt gaccgtggct ccagccaccc cgggacattg 650
 ctaagatggg agggctgttc ttaaactcact cgttcttgaa gctgc 695

<210> 568
 <211> 164
 <212> PRT
 <213> Homo Sapien

<400> 568
 Met Ala Ala Val Gly Ser Leu Leu Gly Leu Ala Ala Ser Ser Trp
 1 5 10 15
 Leu Gly Gly Gln Asn Ala Ser Asp His Ser Leu Trp Leu Leu Arg
 20 25 30
 Lys Pro Arg Gly Ser Ser Cys Pro Gly Thr Gly His Gln Leu Cys
 35 40 45
 Arg Leu Arg Gln Ser Thr Val Lys Ala Thr Gly Pro Ala Leu Arg
 50 55 60
 Arg Leu His Thr Ser Ser Trp Arg Ala Asp Ser Ser Arg Ala Ser
 65 70 75
 Leu Thr Arg Val His Arg Gln Ala Tyr Ala Arg Leu Tyr Pro Val
 80 85 90
 Leu Leu Val Lys Gln Asp Gly Ser Thr Ile His Ile Arg Tyr Arg
 95 100 105
 Glu Pro Arg Arg Met Leu Ala Met Pro Ile Asp Leu Asp Thr Leu
 110 115 120
 Ser Pro Glu Glu Arg Arg Ala Arg Leu Arg Lys Arg Glu Ala Gln
 125 130 135
 Leu Gln Ser Arg Lys Glu Tyr Glu Gln Glu Leu Ser Asp Asp Leu
 140 145 150
 His Val Glu Arg Tyr Arg Gln Phe Trp Thr Arg Thr Lys Lys
 155 160

<210> 569
 <211> 2457
 <212> DNA

<213> Homo Sapien

<400> 569

ggtgccaaagg gttcggggggg gagcactgag gcttttagcag ctctcctgta 50
tctctcatttg catcctcctg tagcagctgg aaaattcaga ttacaggtga 100
aattccctgg ctggcaatct tctgtatatg gacacagtga tgtgccagaa 150
gggcttttga tccctgagac tgaaggaagc tccatttttg gagccctccc 200
acaccttgct ctgtgtgcct ctcatctga tttgaattct tatttttgcta 250
tatgatgaag ctgtaatcct aagtttaaaa aggggagtag gtattgacat 300
catggtagaa ataggctgtc ttatggaact gtagttaggg atcacagcct 350
attggaccag cccagcctt agcagcagtt ctgtacactg attcttccag 400
attagtctac gttccctcga acagacctat gccatgggtt acaactacaa 450
tttggtgtcg attagagtta acttacagac tctcaaaacc ccattctttg 500
ggttttaggca acttcagaa gtagtcattt atttgaattt tagtctaaga 550
tcaactgaat tagggaggtt tgaaagtgtg aaagcaaata gtacattccc 600
aaacactttg taaagaagga atgggtagtg tcaactaaag gaaatgggtg 650
gcatcccagc aaaagaaaga gaccgaaagc aaagtcataa accatgccc 700
cgagctcagc tgtcctgctc cgtgtcctct ccataccctt gttgactgtg 750
ctcatattag ccagagacct aagtgtctct ggaggatgtc cctggggccc 800
cctccccctc cgtgtcact gtctacttcc tgatcctctc ttctgtgcag 850
gagaggtcca ggccttctat gaggacctga gtggccggca gtacgtgaat 900
gaagtcttca acttcagcgt ggacaagctc tatgacctcc tcttcaccaa 950
ctcgcccttc cagcgggatt tcatggagca gcggcgcttc tctgatatca 1000
tcttccatcc atggaaaaag gaggagaatg gaaaccagag ccgagtgatt 1050
ctttacacca tcacccttac caaccctctg gctcccaaaa ctgccactgt 1100
cagggagaca cagaccatgt acaaggcgag ccaggagagt gaatgttacg 1150
tgatagatgc cgaagtcctc acccacgacg tgccctacca cgactacttc 1200
tacacaatca atcgctacac gctcaccogt gtggctcgga acaagagccg 1250
actcagggtc tccacagagc tgcgctatcg aaaacagccc tggggggttag 1300
tgaaaacggt catcgagaag aacttctgga gtgggctgga ggactacttc 1350
cgccatttag agagcgagct ggccaaaacg gagagcactt atttggctga 1400

gatgcacaga caatctccca aagagaaggc cagcaagact acaacggtgc 1450
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 ccaacggttt ccacctgcag agcgtgtcca agctgctgct gggtatcagc 1650
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 cctgtgcaat acatgtacat agaccatata aatatatata tataaatata 2050
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 gataatgcct atgtaccagg gagaaggagc gggccctccc gcgccctgtg 2150
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 ccgcctctca gcaccgacct cccctgatct ccctcctccc accctctggt 2250
 cccacccct tcccttgctg gccattcttg gcttttagaa gggaaatggt 2300
 gagccaaagt tatgcctgcg aagaccctaa ggtctcaaaa agaagtctta 2350
 agacggcatt gcttaagggtg cttcattccc taatcccctt ttgatttggt 2400
 tccaaaataa aagagaatct tttcttcctt aaaaaaaaaa aaaaaaaaaa 2450
 aaaaaaa 2457

<210> 570

<211> 425

<212> PRT

<213> Homo Sapien

<400> 570

Met	Pro	Thr	Ser	Ser	Ala	Val	Leu	Leu	Arg	Val	Leu	Ser	Ile	Pro
1				5					10					15
Leu	Leu	Thr	Val	Leu	Ile	Leu	Ala	Arg	Asp	Leu	Ser	Ala	Leu	Gly
				20					25					30
Gly	Cys	Pro	Trp	Gly	Pro	Leu	Pro	Leu	Arg	Cys	His	Cys	Leu	Leu
				35					40					45

Pro	Asp	Pro	Leu	Phe	Cys	Ala	Gly	Glu	Val	Gln	Ala	Phe	Tyr	Glu	
				50					55					60	
Asp	Leu	Ser	Gly	Arg	Gln	Tyr	Val	Asn	Glu	Val	Phe	Asn	Phe	Ser	
				65					70					75	
Val	Asp	Lys	Leu	Tyr	Asp	Leu	Leu	Phe	Thr	Asn	Ser	Pro	Phe	Gln	
				80					85					90	
Arg	Asp	Phe	Met	Glu	Gln	Arg	Arg	Phe	Ser	Asp	Ile	Ile	Phe	His	
				95					100					105	
Pro	Trp	Lys	Lys	Glu	Glu	Asn	Gly	Asn	Gln	Ser	Arg	Val	Ile	Leu	
				110					115					120	
Tyr	Thr	Ile	Thr	Leu	Thr	Asn	Pro	Leu	Ala	Pro	Lys	Thr	Ala	Thr	
				125					130					135	
Val	Arg	Glu	Thr	Gln	Thr	Met	Tyr	Lys	Ala	Ser	Gln	Glu	Ser	Glu	
				140					145					150	
Cys	Tyr	Val	Ile	Asp	Ala	Glu	Val	Leu	Thr	His	Asp	Val	Pro	Tyr	
				155					160					165	
His	Asp	Tyr	Phe	Tyr	Thr	Ile	Asn	Arg	Tyr	Thr	Leu	Thr	Arg	Val	
				170					175					180	
Ala	Arg	Asn	Lys	Ser	Arg	Leu	Arg	Val	Ser	Thr	Glu	Leu	Arg	Tyr	
				185					190					195	
Arg	Lys	Gln	Pro	Trp	Gly	Leu	Val	Lys	Thr	Phe	Ile	Glu	Lys	Asn	
				200					205					210	
Phe	Trp	Ser	Gly	Leu	Glu	Asp	Tyr	Phe	Arg	His	Leu	Glu	Ser	Glu	
				215					220					225	
Leu	Ala	Lys	Thr	Glu	Ser	Thr	Tyr	Leu	Ala	Glu	Met	His	Arg	Gln	
				230					235					240	
Ser	Pro	Lys	Glu	Lys	Ala	Ser	Lys	Thr	Thr	Thr	Val	Arg	Arg	Arg	
				245					250					255	
Lys	Arg	Pro	His	Ala	His	Leu	Arg	Val	Pro	His	Leu	Glu	Glu	Val	
				260					265					270	
Met	Ser	Pro	Val	Thr	Thr	Pro	Thr	Asp	Glu	Asp	Val	Gly	His	Arg	
				275					280					285	
Ile	Lys	His	Val	Ala	Gly	Ser	Thr	Gln	Thr	Arg	His	Ile	Pro	Glu	
				290					295					300	
Asp	Thr	Pro	Asn	Gly	Phe	His	Leu	Gln	Ser	Val	Ser	Lys	Leu	Leu	
				305					310					315	
Leu	Val	Ile	Ser	Cys	Val	Leu	Val	Leu	Leu	Val	Ile	Leu	Asn	Met	
				320					325					330	
Met	Leu	Phe	Tyr	Lys	Leu	Trp	Met	Leu	Glu	Tyr	Thr	Thr	Gln	Thr	

335	340	345
Leu Thr Ala Trp Gln Gly Leu Arg Leu Gln Glu Arg Leu Pro Gln		
350	355	360
Ser Gln Thr Glu Trp Ala Gln Leu Leu Glu Ser Gln Gln Lys Tyr		
365	370	375
His Asp Thr Glu Leu Gln Lys Trp Arg Glu Ile Ile Lys Ser Ser		
380	385	390
Val Met Leu Leu Asp Gln Met Lys Asp Ser Leu Ile Asn Leu Gln		
395	400	405
Asn Gly Ile Arg Ser Arg Asp Tyr Thr Ser Glu Ser Glu Glu Lys		
410	415	420
Arg Asn Arg Tyr His		
425		

<210> 571

<211> 3244

<212> DNA

<213> Homo Sapien

<400> 571

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gtgctgcaaa ttccccctgtg gataaggggtg gacggctgct ctgtcaactt 150

tgaccatttt cagattctgc gggccattgg taaagggagt tttggaaagg 200

tatgcatcgt gcagaagcga gacactaaga aaatgtatgc aatgaagtac 250

atgaacaagc agaagtgcac cgagagggat gaggttcgga atgttttccg 300

ggagctgcag atcatgcaag ggctggagca ccccttctctg gtcaatctgt 350

ggtactcctt ccaggatgag gaggacatgt tcatgggtggg ggacctgctc 400

ctggggaggcg acctgcgcta ccatctgcag cagaatgtgc atttcacaga 450

ggggactgtg aaactctaca tctgtgagct ggcactggcc ctggagtatc 500

ttcagaggta ccacatcatc cacagagaca tcaagccaga caatatctctg 550

ctggatgaac acggacatgt tcacattaca gacttcaaca tagcgacggg 600

agtgaagga gcagaaaggg cttcctccat ggctggcacc aagccctaca 650

tggctccaga agtattccag gtgtacatgg acagaggccc cggatactcg 700

taccctgtcg actgggtggtc cctgggcatc acagcctatg agctgctgcg 750

gggctggagg ccgtacgaaa tccactcggg caccgccatc gatgaaatcc 800

ttaacatggt	caaggtggag	cgtgtccact	actcctccac	gtggtgcaag	850
gggatgggtg	ccctgctgag	gaagctcctg	accaaggatc	ctgagagccg	900
cgtgtccagc	cttcatgaca	tacagagcgt	gccctacttg	gccgacatga	950
actgggacgc	ggtgttcaag	aaggcactga	tgcccggctt	tgtgcccatt	1000
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agaatccaag	ccacttcaca	aaaagaagaa	gcgattggca	aagaacagat	1100
ccagggatgg	cacaaaggac	agctgcccgc	tgaatggaca	cctgcagcac	1150
tgtttggaga	ctgtccggga	ggaattcatc	atattcaaca	gagagaagct	1200
caggaggcag	cagggacagg	gcagccagct	cttggacacc	gacagccgag	1250
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ctcaccacac	cctgcacccg	tggtctgcagc	agctgagccc	acacttgttg	1350
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ttttctgcat	ctgccaaagg	ggttaaacac	ttctgcccc	cttcaaatta	1600
caagattatg	gggagaacct	aattaggtag	gaaacatgaa	aaacctttga	1650
tatttataaa	atcattttta	cgtgcaaaat	ataaccttaa	tatttgaagt	1700
gacccccatt	ccccaaagca	atcaaaccgt	catgactttg	caatttggca	1750
catcctagct	tgttagaggg	cacttccgaa	aaacacagcc	ctgacagcaa	1800
aataaaggct	tgatatgttg	gccccttcta	tggaaacaac	gctgccaaat	1850
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<213> Homo Sapien

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Gly Val Pro Pro His Pro Pro Ala Pro	Ser Pro Cys Cys Ser Gly		
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Gln Thr Met Leu Lys Met Leu Ser Phe	Lys Leu Leu Leu Leu Ala		
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Val Ala Leu Gly Phe Phe Glu Gly Asp	Ala Lys Phe Gly Glu Arg		
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Pro Pro Lys Arg Leu Lys Arg Arg Asp	Arg Arg Met Met Ser Gln		
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Phe Tyr Thr Cys Arg Gly His Ile Pro	Gly Phe Leu Gln Thr Thr		
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Cys Phe Pro Asp Phe Pro Arg Lys Gln	Val Arg Gly Pro Ala Ser		
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His	Lys	Leu	Val	Gln	Ser	Gly	Ile	Lys	Gly	Gly	Asp	Glu	Arg	Gly
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<211> 80

<212> PRT

<213> Homo Sapien

<400> 576

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Thr	Arg	Thr	Phe	Phe	Pro	Ser	Leu	Val	Ser	Cys	Val	Gln	Val	Pro
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Phe	Ser	Trp	Ile	Pro	Cys	Leu	Glu	Cys	Phe	Leu	Ile	Tyr	Phe	Leu
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35 40 45
Lys Arg Tyr Ala Gly Thr Asp Met His Trp Ile Gly Leu Ser Arg
50 55 60
Lys Gln Gly Asp Ser Trp Lys Trp Thr Asn Gly Thr Thr Phe Asn

65

70

75

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<212> PRT

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 35 40 45
 Leu Arg Arg Gly Lys Lys Trp Glu Ile Ala Lys Pro Leu Lys His
 50 55 60
 Lys Gln Val Asp Glu Glu Lys Met Tyr Glu Asn Val Leu Asn Glu
 65 70 75
 Ser Pro Val Gln Leu Pro Pro Leu Pro Pro Arg Asn Trp Pro Ser
 80 85 90
 Leu Glu Asp Ser Ser Pro Gln Glu Ala Pro Ser Gln Pro Pro Ala
 95 100 105
 Thr Tyr Ser Leu Val Asn Lys Val Lys Asn Lys Lys Thr Val Ser
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 Ala Cys Cys Thr Cys Gly Cys Cys Gly Gly Ala Gly Thr Cys Cys

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Cys	Thr	Gly	Cys	Ala 155	Cys	Thr	Cys	Cys	Ala 160	Cys	Gly	Thr	Cys	Cys 165
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Cys Cys Ala Gly Gly Gly Gly Ala Gly Gly Ala Gly Cys Ala Cys	485	490	495
Ala Gly Ala Thr Ala Thr Thr Thr Thr Cys Cys Thr Gly Thr Ala	500	505	510
Thr Ala Ala Thr Thr Cys Cys Ala Gly Ala Ala Thr Gly Thr Cys	515	520	525
Thr Thr Cys Ala Gly Ala Gly Ala Gly Cys Cys Gly Thr Gly Cys	530	535	540
Ala Thr Gly Gly Ala Thr Thr Gly Cys Thr Thr Cys Ala Thr Thr	545	550	555
Ala Cys Cys Thr Thr Thr Thr Cys Cys Ala Thr Ala Cys Gly Ala	560	565	570
Gly Ala Ala Ala Cys Cys Ala Cys Ala Cys Cys Thr Thr Cys Ala	575	580	585
Thr Thr Gly Thr Cys Cys Thr Gly Cys Ala Cys Cys Thr Gly Gly	590	595	600
Thr Cys Thr Thr Gly Cys Ala Ala Gly Gly Gly Ala Thr Gly Gly	605	610	615
Thr Thr Thr Ala Thr Ala Cys Thr Gly Ala Gly Thr Ala Cys Ala	620	625	630
Cys Cys Thr Gly Gly Gly Ala Ala Gly Thr Ala Thr Thr Thr Gly	635	640	645
Gly Cys Thr Ala Cys Thr Gly Thr Cys Ala Gly Gly Ala Gly Cys	650	655	660
Thr Gly Gly Ala Gly Thr Thr Gly Thr Cys Cys Thr Thr Gly Cys	665	670	675
Ala Thr Thr Ala Cys Cys Thr Thr Cys Thr Thr Cys Thr Gly Cys	680	685	690
Cys Cys Thr Ala Thr Cys Thr Gly Cys Thr Gly Cys Thr Ala Gly			

	695		700		705
Gly Thr Gly Thr	Ala Ala Ala Cys Cys	Thr Gly Thr Thr Thr			
	710		715		720
Thr Thr Thr Thr	Cys Ala Cys Cys Cys	Thr Gly Ala Cys Thr			Thr
	725		730		735
Gly Thr Gly Gly	Ala Ala Cys Cys Ala	Ala Thr Cys Cys Thr			Gly
	740		745		750
Gly Cys Ala Thr	Thr Ala Thr Ala Ala	Cys Ala Ala Ala Ala			Gly
	755		760		765
Cys Ala Ala Ala	Thr Gly Ala Ala Thr	Thr Ala Thr Thr Ala			Thr
	770		775		780
Thr Thr Cys Thr	Thr Cys Ala Thr Gly	Thr Thr Thr Ala Thr			Gly
	785		790		795
Ala Ala Thr Thr	Thr Gly Ala Thr Gly	Ala Ala Gly Thr Gly			Ala
	800		805		810
Thr Gly Thr Thr	Thr Cys Cys Ala Ala	Ala Gly Ala Ala Cys			Gly
	815		820		825
Thr Gly Ala Gly	Gly Thr Gly Cys Thr	Cys Thr Ala Cys Thr			Thr
	830		835		840
Gly Thr Gly Ala	Thr Thr Thr Ala Ala	Gly Gly Ala Ala Ala			Cys
	845		850		855
Cys Ala Gly Cys	Thr Cys Gly Ala Thr	Cys Cys Ala Ala Gly			Cys
	860		865		870
Ala Cys Thr Gly	Cys Ala Gly Thr Gly	Thr Gly Thr Gly Thr			Ala
	875		880		885
Ala Cys Thr Gly	Gly Thr Gly Thr Gly	Thr Gly Cys Ala Cys			Cys
	890		895		900
Gly Thr Thr Thr	Cys Gly Ala Cys Cys	Ala Thr Cys Ala Cys			Thr
	905		910		915
Gly Thr Gly Thr	Thr Thr Gly Gly Gly	Thr Gly Ala Ala Cys			Ala
	920		925		930
Ala Cys Thr Gly	Cys Ala Thr Cys Gly	Gly Gly Gly Cys Cys			Thr
	935		940		945
Gly Gly Ala Ala	Cys Ala Thr Cys Ala	Gly Gly Thr Ala Cys			Thr
	950		955		960
Thr Cys Cys Thr	Cys Ala Thr Cys Thr	Ala Cys Gly Thr Cys			Thr
	965		970		975
Thr Gly Ala Cys	Cys Thr Thr Gly Ala	Cys Gly Gly Cys Cys			Thr
	980		985		990

Cys Gly Gly Cys Thr Gly Cys Cys Ala Cys Cys Gly Thr Cys Gly	995	1000	1005
Cys Cys Ala Thr Thr Gly Thr Gly Ala Gly Cys Ala Cys Cys Ala	1010	1015	1020
Cys Thr Thr Thr Thr Cys Thr Gly Gly Thr Cys Cys Ala Cys Thr	1025	1030	1035
Thr Gly Gly Thr Gly Gly Thr Gly Ala Thr Gly Thr Cys Ala Gly	1040	1045	1050
Ala Thr Thr Thr Ala Thr Ala Cys Cys Ala Gly Gly Ala Gly Ala	1055	1060	1065
Cys Thr Thr Ala Cys Ala Thr Cys Gly Ala Thr Gly Ala Cys Cys	1070	1075	1080
Thr Thr Gly Gly Ala Cys Ala Cys Cys Thr Cys Cys Ala Thr Gly	1085	1090	1095
Thr Thr Ala Thr Gly Gly Ala Cys Ala Cys Gly Gly Thr Cys Thr	1100	1105	1110
Thr Thr Cys Thr Thr Ala Thr Thr Cys Ala Gly Thr Ala Cys Cys	1115	1120	1125
Thr Gly Thr Thr Cys Cys Thr Gly Ala Cys Thr Thr Thr Thr Cys	1130	1135	1140
Cys Ala Cys Gly Gly Ala Thr Thr Gly Thr Cys Thr Thr Cys Ala	1145	1150	1155
Thr Gly Cys Thr Gly Gly Gly Cys Thr Thr Thr Gly Thr Cys Gly	1160	1165	1170
Thr Gly Gly Thr Thr Cys Thr Gly Ala Gly Cys Thr Thr Cys Cys	1175	1180	1185
Thr Cys Cys Thr Gly Gly Gly Thr Gly Gly Cys Thr Ala Cys Cys	1190	1195	1200
Thr Gly Thr Thr Gly Thr Thr Thr Gly Thr Cys Cys Thr Gly Thr	1205	1210	1215
Ala Thr Cys Thr Gly Gly Cys Gly Gly Cys Cys Ala Cys Cys Ala	1220	1225	1230
Ala Cys Cys Ala Gly Ala Cys Thr Ala Cys Thr Ala Ala Cys Gly	1235	1240	1245
Ala Gly Thr Gly Gly Thr Ala Cys Ala Gly Ala Gly Gly Thr Gly	1250	1255	1260
Ala Cys Thr Gly Gly Gly Cys Cys Thr Gly Gly Thr Gly Cys Cys	1265	1270	1275
Ala Gly Cys Gly Thr Thr Gly Thr Cys Cys Cys Cys Thr Thr Gly			

1280	1285	1290
Thr Gly Gly Cys Cys Thr Gly Gly Cys Cys Thr Cys Cys Gly Thr		
1295	1300	1305
Cys Ala Gly Cys Ala Gly Ala Gly Cys Cys Cys Cys Ala Ala Gly		
1310	1315	1320
Thr Cys Cys Ala Cys Cys Gly Gly Ala Ala Cys Ala Thr Thr Cys		
1325	1330	1335
Ala Cys Thr Cys Cys Cys Ala Thr Gly Gly Gly Cys Thr Thr Cys		
1340	1345	1350
Gly Gly Ala Gly Cys Ala Ala Cys Cys Thr Thr Cys Ala Ala Gly		
1355	1360	1365
Ala Gly Ala Thr Cys Thr Thr Thr Cys Thr Ala Cys Cys Thr Gly		
1370	1375	1380
Cys Cys Thr Thr Thr Cys Cys Ala Thr Gly Thr Cys Ala Thr Gly		
1385	1390	1395
Ala Gly Ala Gly Gly Ala Ala Gly Ala Ala Ala Cys Ala Ala Gly		
1400	1405	1410
Ala Ala Thr Gly Ala Cys Ala Ala Gly Thr Gly Thr Ala Thr Gly		
1415	1420	1425
Ala Cys Thr Gly Cys Cys Thr Thr Thr Gly		
1430	1435	

<210> 582
 <211> 344
 <212> PRT
 <213> Homo Sapien

<400> 582

Met Asp Phe Leu Val Leu Phe Leu Phe Tyr Leu Ala Ser Val Leu	
1 5 10 15	
Met Gly Leu Val Leu Ile Cys Val Cys Ser Lys Thr His Ser Leu	
20 25 30	
Lys Gly Leu Ala Arg Gly Gly Ala Gln Ile Phe Ser Cys Ile Ile	
35 40 45	
Pro Glu Cys Leu Gln Arg Ala Val His Gly Leu Leu His Tyr Leu	
50 55 60	
Phe His Thr Arg Asn His Thr Phe Ile Val Leu His Leu Val Leu	
65 70 75	
Gln Gly Met Val Tyr Thr Glu Tyr Thr Trp Glu Val Phe Gly Tyr	
80 85 90	
Cys Gln Glu Leu Glu Leu Ser Leu His Tyr Leu Leu Leu Pro Tyr	
95 100 105	

Leu Leu Leu Gly Val Asn Leu Phe Phe Phe Thr Leu Thr Cys Gly
110 115 120

Thr Asn Pro Gly Ile Ile Thr Lys Ala Asn Glu Leu Leu Phe Leu
125 130 135

His Val Tyr Glu Phe Asp Glu Val Met Phe Pro Lys Asn Val Arg
140 145 150

Cys Ser Thr Cys Asp Leu Arg Lys Pro Ala Arg Ser Lys His Cys
155 160 165

Ser Val Cys Asn Trp Cys Val His Arg Phe Asp His His Cys Val
170 175 180

Trp Val Asn Asn Cys Ile Gly Ala Trp Asn Ile Arg Tyr Phe Leu
185 190 195

Ile Tyr Val Leu Thr Leu Thr Ala Ser Ala Ala Thr Val Ala Ile
200 205 210

Val Ser Thr Thr Phe Leu Val His Leu Val Val Met Ser Asp Leu
215 220 225

Tyr Gln Glu Thr Tyr Ile Asp Asp Leu Gly His Leu His Val Met
230 235 240

Asp Thr Val Phe Leu Ile Gln Tyr Leu Phe Leu Thr Phe Pro Arg
245 250 255

Ile Val Phe Met Leu Gly Phe Val Val Val Leu Ser Phe Leu Leu
260 265 270

Gly Gly Tyr Leu Leu Phe Val Leu Tyr Leu Ala Ala Thr Asn Gln
275 280 285

Thr Thr Asn Glu Trp Tyr Arg Gly Asp Trp Ala Trp Cys Gln Arg
290 295 300

Cys Pro Leu Val Ala Trp Pro Pro Ser Ala Glu Pro Gln Val His
305 310 315

Arg Asn Ile His Ser His Gly Leu Arg Ser Asn Leu Gln Glu Ile
320 325 330

Phe Leu Pro Ala Phe Pro Cys His Glu Arg Lys Lys Gln Glu
335 340

<210> 583

<211> 2973

<212> DNA

<213> Homo Sapien

<400> 583

ccgcggaact ggcaggcgtt tcagagcgtc agaggctgcg gatgagcaga 50

cttggaggac tccaggccag agactaggct gggcgaagag tcgagcgtga 100

agggggctcc	gggccagggt	gacaggagggc	gtgcttgaga	ggaagaagtt	150
gacgggaagg	ccagtgcgac	ggcaaatctc	gtgaaccttg	ggggacgaat	200
gctcaggatg	cgggtccccg	ccctcctcgt	cctcctcttc	tgcttcagag	250
ggagagcagg	cccgtcgccc	catttcctgc	aacagccaga	ggacctggtg	300
gtgctgctgg	gggaggaagc	ccggctgccg	tgtgctctgg	gcgcctactg	350
ggggctagtt	cagtggacta	agagtgggct	ggccctaggg	ggccaaaggg	400
acctaccagg	gtggtccccg	tactggatat	cagggaatgc	agccaatggc	450
cagcatgacc	tccacattag	gcccgtggag	ctagaggatg	aagcatcata	500
tgaatgtcag	gctacacaag	caggcctccg	ctccagacca	gcccactgc	550
acgtgctggt	ccccccagaa	gccccccagg	tgctgggcgg	cccctctgtg	600
tctctggttg	ctggagttcc	tgcgaaacctg	acatgtcggg	gccgtgggga	650
tgccccccct	acccctgaat	tgctgtgggt	ccgagatggg	gtcctgttgg	700
atggagccac	ctttcatcag	accctgctga	aggaagggac	ccctgggtca	750
gtggagagca	ccttaaccct	gacccctttc	agccatgatg	atggagccac	800
ctttgtctgc	cgggcccggg	gccaggccct	gccacagga	agagacacag	850
ctatcacact	gagcctgcag	tacccccag	aggtgactct	gtctgcttcg	900
ccacacactg	tgcaggaggg	agagaaggtc	attttcctgt	gccaggccac	950
agcccagcct	cctgtcacag	gctacagggt	ggcaaaaggg	ggctctccgg	1000
tgctcggggc	ccgcggggcca	aggttagagg	tcgtggcaga	cgcctcgttc	1050
ctgactgagc	ccgtgtcctg	cgaggtcagc	aacgccgtgg	gtagcgccaa	1100
ccgcagtact	gcgctggatg	tgctgtttgg	gccgattctg	caggcaaagc	1150
cggagcccgt	gtccgtggac	gtgggggaag	acgcttcctt	cagctgcgcc	1200
tggcgcgggg	acccgcttcc	acgggtaacc	tggaccgcgc	gcggtggcgc	1250
gcaggtgctg	ggctctggag	ccacactgcg	tcttcgcgtg	gtggggcccg	1300
aggacgcagg	cgactatgtg	tgcagagctg	aggctgggct	atcgggcctg	1350
cggggcgggc	ccgcggaggc	tcgggtgact	gtgaacgctc	cccagtagt	1400
gaccgcctg	cactctgcgc	ctgccttcct	gaggggccct	gctcgcctcc	1450
agtgtctggt	tttcgcctct	cccgccccag	atgccgtggg	ctggctcttg	1500
gatgagggct	tcctggaggc	ggggctgcag	ggccggttcc	tggtggagac	1550

<210> 584
 <211> 708
 <212> PRT
 <213> Homo Sapien

<400> 584

Met	Leu	Arg	Met	Arg	Val	Pro	Ala	Leu	Leu	Val	Leu	Leu	Phe	Cys
1				5				10						15
Phe	Arg	Gly	Arg	Ala	Gly	Pro	Ser	Pro	His	Phe	Leu	Gln	Gln	Pro
				20				25						30
Glu	Asp	Leu	Val	Val	Leu	Leu	Gly	Glu	Glu	Ala	Arg	Leu	Pro	Cys
				35				40						45
Ala	Leu	Gly	Ala	Tyr	Trp	Gly	Leu	Val	Gln	Trp	Thr	Lys	Ser	Gly
				50				55						60
Leu	Ala	Leu	Gly	Gly	Gln	Arg	Asp	Leu	Pro	Gly	Trp	Ser	Arg	Tyr
				65				70						75
Trp	Ile	Ser	Gly	Asn	Ala	Ala	Asn	Gly	Gln	His	Asp	Leu	His	Ile
				80				85						90
Arg	Pro	Val	Glu	Leu	Glu	Asp	Glu	Ala	Ser	Tyr	Glu	Cys	Gln	Ala
				95				100						105
Thr	Gln	Ala	Gly	Leu	Arg	Ser	Arg	Pro	Ala	Gln	Leu	His	Val	Leu
				110				115						120
Val	Pro	Pro	Glu	Ala	Pro	Gln	Val	Leu	Gly	Gly	Pro	Ser	Val	Ser
				125				130						135
Leu	Val	Ala	Gly	Val	Pro	Ala	Asn	Leu	Thr	Cys	Arg	Ser	Arg	Gly
				140				145						150
Asp	Ala	Arg	Pro	Thr	Pro	Glu	Leu	Leu	Trp	Phe	Arg	Asp	Gly	Val
				155				160						165
Leu	Leu	Asp	Gly	Ala	Thr	Phe	His	Gln	Thr	Leu	Leu	Lys	Glu	Gly
				170				175						180
Thr	Pro	Gly	Ser	Val	Glu	Ser	Thr	Leu	Thr	Leu	Thr	Pro	Phe	Ser
				185				190						195
His	Asp	Asp	Gly	Ala	Thr	Phe	Val	Cys	Arg	Ala	Arg	Ser	Gln	Ala
				200				205						210
Leu	Pro	Thr	Gly	Arg	Asp	Thr	Ala	Ile	Thr	Leu	Ser	Leu	Gln	Tyr
				215				220						225
Pro	Pro	Glu	Val	Thr	Leu	Ser	Ala	Ser	Pro	His	Thr	Val	Gln	Glu
				230				235						240
Gly	Glu	Lys	Val	Ile	Phe	Leu	Cys	Gln	Ala	Thr	Ala	Gln	Pro	Pro
				245				250						255
Val	Thr	Gly	Tyr	Arg	Trp	Ala	Lys	Gly	Gly	Ser	Pro	Val	Leu	Gly

260	265	270
Ala Arg Gly Pro Arg Leu Glu Val Val	Ala Asp Ala Ser Phe Leu	
275	280	285
Thr Glu Pro Val Ser Cys Glu Val Ser	Asn Ala Val Gly Ser Ala	
290	295	300
Asn Arg Ser Thr Ala Leu Asp Val Leu	Phe Gly Pro Ile Leu Gln	
305	310	315
Ala Lys Pro Glu Pro Val Ser Val Asp	Val Gly Glu Asp Ala Ser	
320	325	330
Phe Ser Cys Ala Trp Arg Gly Asn Pro	Leu Pro Arg Val Thr Trp	
335	340	345
Thr Arg Arg Gly Gly Ala Gln Val Leu	Gly Ser Gly Ala Thr Leu	
350	355	360
Arg Leu Pro Ser Val Gly Pro Glu Asp	Ala Gly Asp Tyr Val Cys	
365	370	375
Arg Ala Glu Ala Gly Leu Ser Gly Leu	Arg Gly Gly Ala Ala Glu	
380	385	390
Ala Arg Leu Thr Val Asn Ala Pro Pro	Val Val Thr Ala Leu His	
395	400	405
Ser Ala Pro Ala Phe Leu Arg Gly Pro	Ala Arg Leu Gln Cys Leu	
410	415	420
Val Phe Ala Ser Pro Ala Pro Asp Ala	Val Val Trp Ser Trp Asp	
425	430	435
Glu Gly Phe Leu Glu Ala Gly Ser Gln	Gly Arg Phe Leu Val Glu	
440	445	450
Thr Phe Pro Ala Pro Glu Ser Arg Gly	Gly Leu Gly Pro Gly Leu	
455	460	465
Ile Ser Val Leu His Ile Ser Gly Thr	Gln Glu Ser Asp Phe Ser	
470	475	480
Arg Ser Phe Asn Cys Ser Ala Arg Asn	Arg Leu Gly Glu Gly Gly	
485	490	495
Ala Gln Ala Ser Leu Gly Arg Arg Asp	Leu Leu Pro Thr Val Arg	
500	505	510
Ile Val Ala Gly Val Ala Ala Ala Thr	Thr Thr Leu Leu Met Val	
515	520	525
Ile Thr Gly Val Ala Leu Cys Cys Trp	Arg His Ser Lys Ala Ser	
530	535	540
Ala Ser Phe Ser Glu Gln Lys Asn Leu	Met Arg Ile Pro Gly Ser	
545	550	555

ccttatggca accatcgtgg cgttctgctg tgcccgttcc cagagaagta 2000
 cgggagggag atccgggata tcagggaggg ggacagagaa aaaggccagg 2050
 cttaggctgc cccggagagc aagtaagcag gagtgcagt aacaggggtc 2100
 ctaacagtgc tgtgagctcc tggggcaggg agtgggtctg atgcatcgg 2150
 gtatgtgagc ctgggcaaca tgggccttg cagagtgggc gctaggctga 2200
 ggttgacctg gactagactg aacttcatct gcagggcagc cagcattttg 2250
 gattgaacac atagctcttt cagtcaggaa ctgtacagaa agataggggg 2300
 aaaagcggtt tgtggtttga tccttgctct acaagagctg ttagtctaga 2350
 gagaccccat ctctacaaca aaataaaaat aaagagctgc tagtctcacc 2400
 agaaaagcag gtcactcaca cagctgtggg ggagtgggtg gggaagcaat 2450
 aaaggaattg ctttgagaaa acttaa 2476

<210> 586
 <211> 600
 <212> PRT
 <213> Homo Sapien

<400> 586
 Met Lys Pro Phe Gln Leu Asp Leu Leu Phe Val Cys Phe Phe Leu
 1 5 10 15
 Phe Ser Gln Glu Leu Gly Leu Gln Lys Arg Gly Cys Cys Leu Val
 20 25 30
 Leu Gly Tyr Met Ala Lys Asp Lys Phe Arg Arg Met Asn Glu Gly
 35 40 45
 Gln Val Tyr Ser Phe Ser Gln Gln Pro Gln Asp Gln Val Val Val
 50 55 60
 Ser Gly Gln Pro Val Thr Leu Leu Cys Ala Ile Pro Glu Tyr Asp
 65 70 75
 Gly Phe Val Leu Trp Ile Lys Asp Gly Leu Ala Leu Gly Val Gly
 80 85 90
 Arg Asp Leu Ser Ser Tyr Pro Gln Tyr Leu Val Val Gly Asn His
 95 100 105
 Leu Ser Gly Glu His His Leu Lys Ile Leu Arg Ala Glu Leu Gln
 110 115 120
 Asp Asp Ala Val Tyr Glu Cys Gln Ala Ile Gln Ala Ala Ile Arg
 125 130 135
 Ser Arg Pro Ala Arg Leu Thr Val Leu Val Pro Pro Asp Asp Pro
 140 145 150

440	445	450
Ile Ala Trp Ser Trp Lys Glu Asn Val	Leu Glu Ser Gly Thr Ser	
455	460	465
Gly Arg Tyr Thr Val Glu Thr Ile Ser	Thr Glu Glu Gly Val Ile	
470	475	480
Ser Thr Leu Thr Ile Ser Asn Ile Val	Arg Ala Asp Phe Gln Thr	
485	490	495
Ile Tyr Asn Cys Thr Ala Trp Asn Ser	Phe Gly Ser Asp Thr Glu	
500	505	510
Ile Ile Arg Leu Lys Glu Gln Gly Ser	Glu Met Lys Ser Gly Ala	
515	520	525
Gly Leu Glu Ala Glu Ser Val Pro Met	Ala Val Ile Ile Gly Val	
530	535	540
Ala Val Gly Ala Gly Val Ala Phe Leu	Val Leu Met Ala Thr Ile	
545	550	555
Val Ala Phe Cys Cys Ala Arg Ser Gln	Arg Ser Thr Gly Gly Arg	
560	565	570
Ser Gly Ile Ser Gly Arg Gly Thr Glu	Lys Lys Ala Arg Leu Arg	
575	580	585
Leu Pro Arg Arg Ala Ser Lys Gln Glu	Cys Asn Glu Gln Gly Ser	
590	595	600

<210> 587
 <211> 1248
 <212> DNA
 <213> Homo Sapien

<400> 587
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 atttgcattt ctcccaagaa gggtgcttgc caaaaccttt cggccatttt 100
 ctgctttcag agtgagacaa agttcaaaat gacagtctgt cagctcattg 150
 aaggcactag ataccctgcc tgcaggtacc actattcccc cacagagggg 200
 tttgttcttg tcaacttgta tgacttgagg ccagatagtt tccttggtta 250
 tgtaaataa ctcaagatca gctaccgagt ctgagatctc ttctctcatg 300
 gcattggagc tggctgtgcc tgaggcagac ctggaccgtg gacatggggc 350
 aatgccttga gcggaagggg aagccactga attttgggtg tcaccaggta 400
 aacagagccc tcagcatctg aatagaaact gaacaggaac agaagagatt 450
 acactacatc tgagatggag acctttctc tgctgctgct cagcctgggc 500

ctggttcttg cagaagcatc agaaagcaca atgaagataa ttaaagaaga 550
 atttacagac gaagagatgc aatatgacat ggcaaaaagt ggccaagaaa 600
 aacagaccat tgagatatta atgaacccga tcctgttagt taaaaatacc 650
 agcctcagca tgtccaagga tgatatgtct tccacattac tgacattcag 700
 aagtttacat tataatgacc ccaagggaaa cagttcgggt aatgacaaaag 750
 agtggtgcaa tgacatgaca gtctggagaa aagtttcaga agcaaacgga 800
 tcgtgcaagt ggagcaataa cttcatccgc agctccacag aagtgatgcg 850
 cagggtccac agggccccca gctgcaagtt tgtacagaat cctggcataa 900
 gctgctgtga gagcctagaa ctggaaaata cagtgtgcca gttcactaca 950
 ggcaaacaat tccccagggtg ccaataccat agtgttacct cattagagaa 1000
 gatattgaca gtgctgacag gtcattctct gatgagctgg ttagtttgtg 1050
 gctctaagtt gtaaatccca cagagcttta ggactagggt cttactaaag 1100
 aaggacctct tcttgttcat tcttgtttaa acctttcctt aatatctact 1150
 cttagcact atagtgaact cctgattatt tattctaact ggaggagtga 1200
 aaaatccaaa attgtggata attcaattaa aagttatgac tgataccg 1248

<210> 588

<211> 199

<212> PRT

<213> Homo Sapien

<400> 588

Met	Glu	Thr	Phe	Pro	Leu	Leu	Leu	Leu	Ser	Leu	Gly	Leu	Val	Leu
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Ala	Glu	Ala	Ser	Glu	Ser	Thr	Met	Lys	Ile	Ile	Lys	Glu	Glu	Phe
				20					25					30
Thr	Asp	Glu	Glu	Met	Gln	Tyr	Asp	Met	Ala	Lys	Ser	Gly	Gln	Glu
				35					40					45
Lys	Gln	Thr	Ile	Glu	Ile	Leu	Met	Asn	Pro	Ile	Leu	Leu	Val	Lys
				50					55					60
Asn	Thr	Ser	Leu	Ser	Met	Ser	Lys	Asp	Asp	Met	Ser	Ser	Thr	Leu
				65					70					75
Leu	Thr	Phe	Arg	Ser	Leu	His	Tyr	Asn	Asp	Pro	Lys	Gly	Asn	Ser
				80					85					90
Ser	Gly	Asn	Asp	Lys	Glu	Cys	Cys	Asn	Asp	Met	Thr	Val	Trp	Arg
				95					100					105
Lys	Val	Ser	Glu	Ala	Asn	Gly	Ser	Cys	Lys	Trp	Ser	Asn	Asn	Phe

	110	115	120
Arg Tyr Ala Gly	Leu Leu Leu Gly Cys	Ala Trp Gly Gln Ser	Leu
	125	130	135
Ala Phe Ser Gly	Ala Ala Leu Gly Cys	Ser Trp Leu Gly Tyr	Ser
	140	145	150
Ser Ala Phe Ala	Ser Cys Ser Leu Arg	Leu Pro Pro Glu Pro	Glu
	155	160	165
Arg Pro Arg Phe	Ala Ala Phe Thr Ala	Thr Leu His Ala Val	Gly
	170	175	180
Phe Val Leu Pro	Leu Ala Val Leu Cys	Leu Thr Ser Leu Gln	Val
	185	190	195
His Arg Val Ala	Arg Arg His Cys Gln	Arg Met Asp Thr Val	Thr
	200	205	210
Met Lys Ala Leu	Ala Leu Leu Ala Asp	Leu His Pro Ser Val	Arg
	215	220	225
Gln Arg Cys Leu	Ile Gln Gln Lys Arg	Arg Arg His Arg Ala	Thr
	230	235	240
Arg Lys Ile Gly	Ile Ala Ile Ala Thr	Phe Leu Ile Cys Phe	Ala
	245	250	255
Pro Tyr Val Met	Thr Arg Leu Ala Glu	Leu Val Pro Phe Val	Thr
	260	265	270
Val Asn Ala Gln	Trp Gly Ile Leu Ser	Lys Cys Leu Thr Tyr	Ser
	275	280	285
Lys Ala Val Ala	Asp Pro Phe Thr Tyr	Ser Leu Leu Arg Arg	Pro
	290	295	300
Phe Arg Gln Val	Leu Ala Gly Met Val	His Arg Leu Leu Lys	Arg
	305	310	315
Thr Pro Arg Pro	Ala Ser Thr His Asp	Ser Ser Leu Asp Val	Ala
	320	325	330
Gly Met Val His	Gln Leu Leu Lys Arg	Thr Pro Arg Pro Ala	Ser
	335	340	345
Thr His Asn Gly	Ser Val Asp Thr Glu	Asn Asp Ser Cys Leu	Gln
	350	355	360
Gln Thr His			

<210> 591
 <211> 2037
 <212> DNA
 <213> Homo Sapien

<400> 591

aacatggctg cggcgccctgg gctgctcgtc tggctgctcg tgctccggct 50
 gccctggcgg gtgccggggc agctggaccc cagcactggc cggcggttct 100
 cggagcacaa actctgcgcg gacgacgaat gcagcatgat gtaccgcggt 150
 gaggtctcttg aagatttcac aggcccggat tgcgttttg tgaattttaa 200
 aaaaggtgat cctgtatatg ttactataa actggcaaga ggatggcctg 250
 aagtttgggc tggaagtgtt ggacgcactt ttggatatat tccaaaagat 300
 ttaatccagg tagttcatga atataccaaa gaagagctac aagttccaac 350
 agatgagacg gattttgttt gttttgatgg aggaagagat gattttcata 400
 attataatgt agaagaactt ttagggtttt tggaactgta caattctgca 450
 gctacagatt ctgagaaagc tgtagaaaaa actttacagg atatggaaaa 500
 aaacctgaa ttatctaagg aaaggaacc tgaacctgaa ccagtagaag 550
 ccaactcaga ggaaagtgat agtgtattct cagaaaacac tgaggatctt 600
 caggaacagt ttacaactca gaagcaccac tcccatgcaa acagccaagc 650
 aaatcatgct caggagagc aggttcatt tgaatctttt gaagaaatgc 700
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<210> 592

<211> 499

<212> PRT

<213> Homo Sapien

<400> 592

Met	Ala	Ala	Ala	Pro	Gly	Leu	Leu	Val	Trp	Leu	Leu	Val	Leu	Arg
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Leu	Pro	Trp	Arg	Val	Pro	Gly	Gln	Leu	Asp	Pro	Ser	Thr	Gly	Arg
				20					25					30

Arg	Phe	Ser	Glu	His	Lys	Leu	Cys	Ala	Asp	Asp	Glu	Cys	Ser	Met
				35					40					45

Met	Tyr	Arg	Gly	Glu	Ala	Leu	Glu	Asp	Phe	Thr	Gly	Pro	Asp	Cys
				50					55					60

Arg	Phe	Val	Asn	Phe	Lys	Lys	Gly	Asp	Pro	Val	Tyr	Val	Tyr	Tyr
				65					70					75

Lys	Leu	Ala	Arg	Gly	Trp	Pro	Glu	Val	Trp	Ala	Gly	Ser	Val	Gly
				80					85					90

Arg	Thr	Phe	Gly	Tyr	Phe	Pro	Lys	Asp	Leu	Ile	Gln	Val	Val	His
				95					100					105

Glu	Tyr	Thr	Lys	Glu	Glu	Leu	Gln	Val	Pro	Thr	Asp	Glu	Thr	Asp
				110					115					120

Phe	Val	Cys	Phe	Asp	Gly	Gly	Arg	Asp	Asp	Phe	His	Asn	Tyr	Asn
				125					130					135

Val	Glu	Glu	Leu	Leu	Gly	Phe	Leu	Glu	Leu	Tyr	Asn	Ser	Ala	Ala
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Pro	Asp	Asn	Val	Asp	Asp	Gly	Leu	Phe	Ile	Val	Asp	Ile	Pro	Lys
				440					445					450
Thr	Asn	Asn	Asp	Lys	Glu	Val	Asn	Ala	Glu	His	His	Ile	Lys	Gly
				455					460					465
Lys	Gly	Arg	Gly	Val	Gln	Glu	Ser	Lys	Arg	Gly	Leu	Val	Gln	Asp
				470					475					480
Glu	Thr	Glu	Leu	Glu	Asp	Glu	Asn	Gln	Glu	Gly	Phe	Lys	Thr	Glu
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Pro Ile Lys Leu														

<210> 593
 <211> 1209
 <212> DNA
 <213> Homo Sapien

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 atggaaataa cctaagaaaa agagggcatc cagctccatc tcccatttgg 250
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 gctggtgacg ttggggatga tgtttttgca gatattctaat gacattaact 350
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 gataacttat ccagcaact gggcaactcc aacaacttgt ccatggagga 450
 ggaatttctc aagtcacaga tctccagtct actgaagagg caggaacaaa 500
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 cataaaaaga ggagtacaac atactgagaa aagagctcca gtaacaaata 950

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ggatgtgctt attttcaaaa aggaaatatt tatatttctc gctgtagtgc 1050
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atttggatta gtatgcttct tccaaattct ccaagaagta agagacttgt 1150
gagtaagctc atatgaggaa agaggaaact acggtaccag agcaagggcg 1200
aattctgca 1209

<210> 594

<211> 232

<212> PRT

<213> Homo Sapien

<400> 594

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Ala	Gly	Ala	Arg	Asn	Asn	Arg	Asp	Gly	Asn	Asn	Leu	Arg	Lys	Arg
				20					25					30
Gly	His	Pro	Ala	Pro	Ser	Pro	Ile	Trp	Arg	His	Ala	Ala	Leu	Gly
				35					40					45
Leu	Val	Thr	Leu	Cys	Leu	Met	Leu	Leu	Ile	Gly	Leu	Val	Thr	Leu
				50					55					60
Gly	Met	Met	Phe	Leu	Gln	Ile	Ser	Asn	Asp	Ile	Asn	Ser	Asp	Ser
				65					70					75
Glu	Lys	Leu	Ser	Gln	Leu	Gln	Lys	Thr	Ile	Gln	Gln	Gln	Gln	Asp
				80					85					90
Asn	Leu	Ser	Gln	Gln	Leu	Gly	Asn	Ser	Asn	Asn	Leu	Ser	Met	Glu
				95					100					105
Glu	Glu	Phe	Leu	Lys	Ser	Gln	Ile	Ser	Ser	Leu	Leu	Lys	Arg	Gln
				110					115					120
Glu	Gln	Met	Ala	Ile	Lys	Leu	Cys	Gln	Glu	Leu	Ile	Ile	His	Thr
				125					130					135
Ser	Asp	His	Arg	Cys	Asn	Pro	Cys	Pro	Lys	Met	Trp	Gln	Trp	Tyr
				140					145					150
Gln	Asn	Ser	Cys	Tyr	Tyr	Phe	Thr	Thr	Asn	Glu	Glu	Lys	Thr	Trp
				155					160					165
Ala	Asn	Ser	Arg	Lys	Asp	Cys	Ile	Asp	Lys	Asn	Ser	Thr	Leu	Val
				170					175					180
Lys	Ile	Asp	Ser	Leu	Glu	Glu	Lys	Asp	Phe	Leu	Met	Ser	Gln	Pro
				185					190					195
Leu	Leu	Met	Phe	Ser	Phe	Phe	Trp	Leu	Gly	Leu	Ser	Trp	Asp	Ser

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Ser Gly Arg Ser Trp Phe Trp Glu Asp Gly Ser Val Pro Ser Pro					
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Ser Leu Tyr Val Ser Asn Tyr					
	230				

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 <211> 1107
 <212> DNA
 <213> Homo Sapien

<400> 595
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 ctgtactggg agagctagga tggaaaacat atccattaaa tgggtgggat 300
 gccatcactg aaatggatga acataatagg cccattcaca cataccagg 350
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<210> 596

<211> 285

<212> PRT

<213> Homo Sapien

<400> 596

Met	Gly	Gly	Cys	Glu	Val	Arg	Glu	Phe	Leu	Leu	Gln	Phe	Gly	Phe
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Phe	Leu	Pro	Met	Leu	Thr	Ala	Trp	Pro	Gly	Asp	Cys	Ser	His	Val
				20					25					30

Ser	Asn	Asn	Gln	Val	Val	Leu	Leu	Asp	Thr	Thr	Thr	Val	Leu	Gly
				35					40					45

Glu	Leu	Gly	Trp	Lys	Thr	Tyr	Pro	Leu	Asn	Gly	Trp	Asp	Ala	Ile
				50					55					60

Thr	Glu	Met	Asp	Glu	His	Asn	Arg	Pro	Ile	His	Thr	Tyr	Gln	Val
				65					70					75

Cys	Asn	Val	Met	Glu	Pro	Asn	Gln	Asn	Asn	Trp	Leu	Arg	Thr	Asn
				80					85					90

Trp	Ile	Ser	Arg	Asp	Ala	Ala	Gln	Lys	Ile	Tyr	Val	Glu	Met	Lys
				95					100					105

Phe	Thr	Leu	Arg	Asp	Cys	Asn	Ser	Ile	Pro	Trp	Val	Leu	Gly	Thr
				110					115					120

Cys	Lys	Glu	Thr	Phe	Asn	Leu	Phe	Tyr	Met	Glu	Ser	Asp	Glu	Ser
				125					130					135

His	Gly	Ile	Lys	Phe	Lys	Pro	Asn	Gln	Tyr	Thr	Lys	Ile	Asp	Thr
				140					145					150

Ile	Ala	Ala	Asp	Glu	Ser	Phe	Thr	Gln	Met	Asp	Leu	Gly	Asp	Arg
				155					160					165

Ile	Leu	Lys	Leu	Asn	Thr	Glu	Ile	Arg	Glu	Val	Gly	Pro	Ile	Glu
				170					175					180

Arg	Lys	Gly	Phe	Tyr	Leu	Ala	Phe	Gln	Asp	Ile	Gly	Ala	Cys	Ile
				185					190					195

Ala	Leu	Val	Ser	Val	Arg	Val	Phe	Tyr	Lys	Lys	Cys	Pro	Phe	Thr
				200					205					210

Val	Arg	Asn	Leu	Ala	Met	Phe	Pro	Asp	Thr	Ile	Pro	Arg	Val	Asp
				215					220					225

Ser	Ser	Ser	Leu	Val	Glu	Val	Arg	Gly	Ser	Cys	Val	Lys	Ser	Ala
				230					235					240

Glu	Glu	Arg	Asp	Thr	Pro	Lys	Leu	Tyr	Cys	Gly	Ala	Asp	Gly	Asp
				245					250					255

Trp	Leu	Val	Pro	Leu	Gly	Arg	Cys	Ile	Cys	Ser	Thr	Gly	Tyr	Glu
				260					265					270
Glu	Ile	Glu	Gly	Ser	Cys	His	Gly	Ala	Ser	Lys	Gly	Arg	Cys	Phe
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<210> 597
 <211> 2380
 <212> DNA
 <213> Homo Sapien

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<210> 598

<211> 705

<212> PRT

<213> Homo Sapien

<400> 598

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Thr	His	Cys	Ser	Pro	Gly	Leu	Ser	Cys	Arg	Leu	Trp	Asp	Ser	Asp	
				35					40					45	
Ile	Leu	Cys	Leu	Pro	Gly	Asp	Ile	Val	Pro	Ala	Pro	Gly	Pro	Val	
				50					55					60	
Leu	Ala	Pro	Thr	His	Leu	Gln	Thr	Glu	Leu	Val	Leu	Arg	Cys	Gln	
				65					70					75	
Lys	Glu	Thr	Asp	Cys	Asp	Leu	Cys	Leu	Arg	Val	Ala	Val	His	Leu	
				80					85					90	
Ala	Val	His	Gly	His	Trp	Glu	Glu	Pro	Glu	Asp	Glu	Glu	Lys	Phe	
				95					100					105	
Gly	Gly	Ala	Ala	Asp	Ser	Gly	Val	Glu	Glu	Pro	Arg	Asn	Ala	Ser	
				110					115					120	
Leu	Gln	Ala	Gln	Val	Val	Leu	Ser	Phe	Gln	Ala	Tyr	Pro	Thr	Ala	
				125					130					135	
Arg	Cys	Val	Leu	Leu	Glu	Val	Gln	Val	Pro	Ala	Ala	Leu	Val	Gln	
				140					145					150	
Phe	Gly	Gln	Ser	Val	Gly	Ser	Val	Val	Tyr	Asp	Cys	Phe	Glu	Ala	
				155					160					165	
Ala	Leu	Gly	Ser	Glu	Val	Arg	Ile	Trp	Ser	Tyr	Thr	Gln	Pro	Arg	
				170					175					180	
Tyr	Glu	Lys	Glu	Leu	Asn	His	Thr	Gln	Gln	Leu	Pro	Ala	Leu	Pro	
				185					190					195	
Trp	Leu	Asn	Val	Ser	Ala	Asp	Gly	Asp	Asn	Val	His	Leu	Val	Leu	
				200					205					210	
Asn	Val	Ser	Glu	Glu	Gln	His	Phe	Gly	Leu	Ser	Leu	Tyr	Trp	Asn	
				215					220					225	
Gln	Val	Gln	Gly	Pro	Pro	Lys	Pro	Arg	Trp	His	Lys	Asn	Leu	Thr	
				230					235					240	
Gly	Pro	Gln	Ile	Ile	Thr	Leu	Asn	His	Thr	Asp	Leu	Val	Pro	Cys	
				245					250					255	
Leu	Cys	Ile	Gln	Val	Trp	Pro	Leu	Glu	Pro	Asp	Ser	Val	Arg	Thr	
				260					265					270	
Asn	Ile	Cys	Pro	Phe	Arg	Glu	Asp	Pro	Arg	Ala	His	Gln	Asn	Leu	
				275					280					285	
Trp	Gln	Ala	Ala	Arg	Leu	Arg	Leu	Leu	Thr	Leu	Gln	Ser	Trp	Leu	
				290					295					300	
Leu	Asp	Ala	Pro	Cys	Ser	Leu	Pro	Ala	Glu	Ala	Ala	Leu	Cys	Trp	

Val Leu Pro Asp Phe Leu Gln Gly Arg Ala Pro Gly Ser Tyr Val
605 610 615

Gly Ala Cys Phe Asp Arg Leu Leu His Pro Asp Ala Val Pro Ala
620 625 630

Leu Phe Arg Thr Val Pro Val Phe Thr Leu Pro Ser Gln Leu Pro
635 640 645

Asp Phe Leu Gly Ala Leu Gln Gln Pro Arg Ala Pro Arg Ser Gly
650 655 660

Arg Leu Gln Glu Arg Ala Glu Gln Val Ser Arg Ala Leu Gln Pro
665 670 675

Ala Leu Asp Ser Tyr Phe His Pro Pro Gly Thr Pro Ala Pro Gly
680 685 690

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<210> 599
<211> 1297
<212> DNA
<213> Homo Sapien

<400> 599
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ctctctttgc tatgacatca ccgtcatccc taagttcaga cctggaccac 150

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tggacatact tacagagcaa ctgcgtgaca ttcagctgga gaattacaca 350

cccaaggaac ccctcaccct gcaggcaagg atgtcttgtg agcagaaagc 400

tgaaggacac agcagtggat cttggcagtt cagtttcgat gggcagatct 450

tcctcctctt tgactcagag aagagaatgt ggacaacggt tcatcctgga 500

gccagaaaga tgaaagaaaa gtgggagaat gacaagggtg tggccatgtc 550

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gagagtcctt tagagtgaca ggtaaagct gataccaaaa ggctcctgtg 800

Arg	Lys	Met	Lys	Glu	Lys	Trp	Glu	Asn	Asp	Lys	Val	Val	Ala	Met
				170					175					180
Ser	Phe	His	Tyr	Phe	Ser	Met	Gly	Asp	Cys	Ile	Gly	Trp	Leu	Glu
				185					190					195
Asp	Phe	Leu	Met	Gly	Met	Asp	Ser	Thr	Leu	Glu	Pro	Ser	Ala	Gly
				200					205					210
Ala	Pro	Leu	Ala	Met	Ser	Ser	Gly	Thr	Thr	Gln	Leu	Arg	Ala	Thr
				215					220					225
Ala	Thr	Thr	Leu	Ile	Leu	Cys	Cys	Leu	Leu	Ile	Ile	Leu	Pro	Cys
				230					235					240
Phe	Ile	Leu	Pro	Gly	Ile									
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<210> 601

<211> 1841

<212> DNA

<213> Homo Sapien

<400> 601

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tctaccatgc tgaagataaa caaacaagaa gacctggaat ttgccgcgtc 700
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Leu Leu Ile Gly Leu Ala Ala Leu Gly Leu Leu Phe Phe Gln Tyr
65 70 75

Tyr Gln Leu Ser Asn Thr Gly Gln Asp Thr Ile Ser Gln Met Glu
80 85 90

Glu Arg Leu Gly Asn Thr Ser Gln Glu Leu Gln Ser Leu Gln Val
95 100 105

Gln Asn Ile Lys Leu Ala Gly Ser Leu Gln His Val Ala Glu Lys
110 115 120

Leu Cys Arg Glu Leu Tyr Asn Lys Ala Gly Ala His Arg Cys Ser
125 130 135

Pro Cys Thr Glu Gln Trp Lys Trp His Gly Asp Asn Cys Tyr Gln
140 145 150

Phe Tyr Lys Asp Ser Lys Ser Trp Glu Asp Cys Lys Tyr Phe Cys
155 160 165

Leu Ser Glu Asn Ser Thr Met Leu Lys Ile Asn Lys Gln Glu Asp
170 175 180

Leu Glu Phe Ala Ala Ser Gln Ser Tyr Ser Glu Phe Phe Tyr Ser
185 190 195

Tyr Trp Thr Gly Leu Leu Arg Pro Asp Ser Gly Lys Ala Trp Leu
200 205 210

Trp Met Asp Gly Thr Pro Phe Thr Ser Glu Leu Phe His Ile Ile
215 220 225

Ile Asp Val Thr Ser Pro Arg Ser Arg Asp Cys Val Ala Ile Leu
230 235 240

Asn Gly Met Ile Phe Ser Lys Asp Cys Lys Glu Leu Lys Arg Cys
245 250 255

Val Cys Glu Arg Arg Ala Gly Met Val Lys Pro Glu Ser Leu His
260 265 270

Val Pro Pro Glu Thr Leu Gly Glu Gly Asp
275 280

<210> 603

<211> 957

<212> DNA

<213> Homo Sapien

<400> 603

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tccctccttc tgctactggg ggccctgtct ggatgggcgg ccagcgatga 150

ccccattgag aaggtcattg aagggatcaa ccgagggctg agcaatgcag 200

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<210> 604

<211> 247

<212> PRT

<213> Homo Sapien

<400> 604

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Leu	Gly	Ala	Leu	Ser	Gly	Trp	Ala	Ala	Ser	Asp	Asp	Pro	Ile	Glu
				20					25					30
Lys	Val	Ile	Glu	Gly	Ile	Asn	Arg	Gly	Leu	Ser	Asn	Ala	Glu	Arg
				35					40					45
Glu	Val	Gly	Lys	Ala	Leu	Asp	Gly	Ile	Asn	Ser	Gly	Ile	Thr	His
				50					55					60
Ala	Gly	Arg	Glu	Val	Glu	Lys	Val	Phe	Asn	Gly	Leu	Ser	Asn	Met
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Gly	Ser	His	Thr	Gly	Lys	Glu	Leu	Asp	Lys	Gly	Val	Gln	Gly	Leu
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Asn	His	Gly	Met	Asp	Lys	Val	Ala	His	Glu	Ile	Asn	His	Gly	Ile
				95					100					105

Gly	Gln	Ala	Gly	Lys	Glu	Ala	Glu	Lys	Leu	Gly	His	Gly	Val	Asn
				110					115					120
Asn	Ala	Ala	Gly	Gln	Ala	Gly	Lys	Glu	Ala	Asp	Lys	Ala	Val	Gln
			125						130					135
Gly	Phe	His	Thr	Gly	Val	His	Gln	Ala	Gly	Lys	Glu	Ala	Glu	Lys
			140						145					150
Leu	Gly	Gln	Gly	Val	Asn	His	Ala	Ala	Asp	Gln	Ala	Gly	Lys	Glu
			155						160					165
Val	Glu	Lys	Leu	Gly	Gln	Gly	Ala	His	His	Ala	Ala	Gly	Gln	Ala
			170						175					180
Gly	Lys	Glu	Leu	Gln	Asn	Ala	His	Asn	Gly	Val	Asn	Gln	Ala	Ser
			185						190					195
Lys	Glu	Ala	Asn	Gln	Leu	Leu	Asn	Gly	Asn	His	Gln	Ser	Gly	Ser
			200						205					210
Ser	Ser	His	Gln	Gly	Gly	Ala	Thr	Thr	Thr	Pro	Leu	Ala	Ser	Gly
			215						220					225
Ala	Ser	Val	Asn	Thr	Pro	Phe	Ile	Asn	Leu	Pro	Ala	Leu	Trp	Arg
			230						235					240
Ser	Val	Ala	Asn	Ile	Met	Pro								
			245											

<210> 605
 <211> 1098
 <212> DNA
 <213> Homo Sapien

<400> 605
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<210> 606
 <211> 188
 <212> PRT
 <213> Homo Sapien

<400> 606
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 Tyr Phe Gln Val Leu Ser Pro Gly Asp Ile Arg Tyr Ile Phe Thr
 35 40 45
 Ala Thr Pro Ala Lys Asp Phe Gly Gly Ile Phe His Thr Arg Tyr
 50 55 60
 Glu Gln Ile His Leu Val Pro Ala Glu Pro Pro Glu Ala Cys Gly
 65 70 75
 Glu Leu Ser Asn Gly Phe Phe Ile Gln Asp Gln Ile Ala Leu Val
 80 85 90
 Glu Arg Gly Gly Cys Ser Phe Leu Ser Lys Thr Arg Val Val Gln
 95 100 105
 Glu His Gly Gly Arg Ala Val Ile Ile Ser Asp Asn Ala Val Asp
 110 115 120
 Asn Asp Ser Phe Tyr Val Glu Met Ile Gln Asp Ser Thr Gln Arg
 125 130 135
 Thr Ala Asp Ile Pro Ala Leu Phe Leu Leu Gly Arg Asp Gly Tyr
 140 145 150

Met Ile Arg Arg Ser Leu Glu Gln His Gly Leu Pro Trp Ala Ile
 155 160 165
 Ile Ser Ile Pro Val Asn Val Thr Ser Ile Pro Thr Phe Glu Leu
 170 175 180
 Leu Gln Pro Pro Trp Thr Phe Trp
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<210> 607
 <211> 2265
 <212> DNA
 <213> Homo Sapien

<400> 607
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<210> 610

<211> 261

<212> PRT

<213> Homo Sapien

<400> 610

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Ser Phe Ser Ile Tyr Ser Leu Gln Val Pro Ala Val Pro Gly Leu
20 25 30

Thr Cys Trp Ala Leu Thr Ala Glu Pro Gly Trp Gly Gln Asn Lys
35 40 45

Gly Ala Thr Thr Cys Ala Thr Asn Ser His Ser Asp Ser Glu Leu
50 55 60

Arg Pro Glu Ile Phe Ser Ser Arg Glu Ala Trp Gln Phe Phe Leu
65 70 75

Leu Leu Trp Ser Pro Asp Phe Arg Pro Lys Met Lys Ala Ser Ser
80 85 90

Leu Ala Phe Ser Leu Leu Ser Ala Ala Phe Tyr Leu Leu Trp Thr
95 100 105

Pro Ser Thr Gly Leu Lys Thr Leu Asn Leu Gly Ser Cys Val Ile
110 115 120

Ala Thr Asn Leu Gln Glu Ile Arg Asn Gly Phe Ser Glu Ile Arg
125 130 135

Gly Ser Val Gln Ala Lys Asp Gly Asn Ile Asp Ile Arg Ile Leu
140 145 150

Arg Arg Thr Glu Ser Leu Gln Asp Thr Lys Pro Ala Asn Arg Cys
155 160 165

Cys Leu Leu Arg His Leu Leu Arg Leu Tyr Leu Asp Arg Val Phe
170 175 180

Lys Asn Tyr Gln Thr Pro Asp His Tyr Thr Leu Arg Lys Ile Ser
185 190 195

Ser Leu Ala Asn Ser Phe Leu Thr Ile Lys Lys Asp Leu Arg Leu
200 205 210

Ser His Ala His Met Thr Cys His Cys Gly Glu Glu Ala Met Lys
215 220 225

Lys Tyr Ser Gln Ile Leu Ser His Phe Glu Lys Leu Glu Pro Gln
230 235 240

Ala Ala Val Val Lys Ala Leu Gly Glu Leu Asp Ile Leu Leu Gln
245 250 255

Trp Met Glu Glu Thr Glu
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<210> 611

<211> 43

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe.

<400> 611
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<210> 612

<211> 41

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe.

<400> 612

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Sequence